# THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

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## The Present Position of the Farmer.

As time rolls onward, there are periods in the social, as well as the political world, which are marked by more than ordinary interest. Such a period is now before us in the agricultural world. There never was a time when agriculture, as an occupation, was so well thought of and so favorably looked upon, as at this moment. The tide against which we have so long struggled, seems really about to turn, and many who formerly thought that the farmer's life was one of increasing toil, and that the farmer himself had no need of much more intelligence than the animal who aided him in his labor, really begin to think that it is possible for him to become a rational, thinking man, and through the aid of his intelligence to benefit his condition. True—there has been much eulogy pronounced upon the life of the farmer by some individuals in other occupations; for example, the politician, anxious to secure his election, has complimented the agriculturist to the fullest extent. He has called him the sinew of the country—the bone and muscle of the state, the sine qua non of society—while at the same time he has used him as a tool, wherewith he has worked himself into office, but he has taken good care, after once installed, to do nothing whatever for the benefit of agriculture. The merchant compliments agriculture, and talks of the beauties and charms of a country life—he sighs for the time when he can retire from the cares of business, and settle himself upon a farm. So too, the lawyer, the doctor —each in turn, long for the hour when they may lead a *farmer's life*. Indeed, farming seems to these men a kind of Eldorado, a perfect elysium, a resting place from all their labors. But this idea of farming is very different from the life that the practical agriculturist is leading. Few of the classes spoken of would like to become *working farmers*, or be dependent upon their farms for a support. All they mean is simply, that having accumulated money in other occupations, they are willing to spend a portion of it in rural pleasures.

What then is it, about what is called *practical* agriculture, that ceases to attract men to it, and even drives them from its ranks? But one answer to this question meets us on every side—its hard labor and small profit! And looking about through many sections of the country, seeing how many farmers live, (or rather exist,) one might almost be inclined to submit fully to the answer, and join in the general saying, that farming is truly all work and no profit, or very little at least. Look at that man, says one; he has toiled, toiled, toiled, through long days and weary years, and what has he made—something to be sure—but what he has got has been gained more by *saving* than *making*. He has denied himself the fruit of his own labor. He has stinted himself and his family, and scarce allowed them the common necessaries of life, and for what? Why to get a few paltry dollars together, that had he been engaged in any other business, he might have obtained with half the toil. Thus says the opposer of agriculture as an occupation, and he backs his assertion not by one case alone, but by scores.

Now, for my own part, I have ever considered agriculture as the most useful and honorable of all occupations, and as such, I am willing to stand by it through good and through evil report. I love its toils, for they are at least honest toils. I love its labors, for they are Heaven ordained. Nor do I believe a righteous Providence ever meant that an occupation, which is universally acknowledged, by great minds, at least, to be at the fountain head of all social prosperity, should be one so wanting in attraction, and in the proper reward due to labor, as to drive from its ranks all men of refinement and intelligence. Without wishing then, at present, to deny the objections so often urged against agriculture as an occupation, let us rather admit the facts of the case, and try to find out whether the occupation, or the men pursuing it, are in fault, and then seek for the remedy.

Now, if it could be proved, that no man had ever gained a competency for his labor, through agriculture as an occupation, and that all men following it had been always obliged to restrict themselves to the greatest economy, in order to gain a livelihood—that it had never, in any instance, paid a fair profit on the capital invested—then, indeed, we might be somewhat disheartened, and might consider our case rather a hopeless one. But I think a very different state of things can be proved. The single case of Mr. MORE, who took the second premium from the New-York State Agricultural Society, in 1850, would of itself, set the matter at rest—for it has been truly said, that "whatever man has done, man may do." So far as we can gather facts from Mr. MORE's statement, we think the amount actually made upon his capital invested, is very large, and as Mr. M. himself, has been unable, through bodily weakness, to do any of the hard physical labor, his statement proves conclusively, that the head can be made to work upon a farm, to as good advantage as the hand.

But again, in almost every county in this state, and others, where agricultural societies exist, men are found in the ranks of practical agriculture, contending for the

premiums offered for crops of various kinds, and as the societies all demand affidavits from the several parties concerned, such as the surveyor who surveys the ground, the party who raises the crop, and the person or persons who assist in gathering and harvesting the crops, there is little room left for deception. The nett profit on these crops, after deducting all expenses, interest of land, &c., &c., varies from $30 to 100 per acre, according to circumstances—the average may be considered $50 per acre. I presume no one will deny that this is a large profit on the capital invested.

But, says one, still doubtful that anything can be made by farming, remember this is but *one acre;* it is not to be expected that a man can have his whole farm in such order. Here then, is just the very point that I would urge upon the attention of the farmers in our section of country at least. It is a system of *thorough culture*, combined with proper calculation—from these alone, are we to look for large profits. Land half worked can never more than half pay. *Thorough culture* is the only true system for any farmer, whether he cultivates 10 acres or 100. The more I have thought of this, scanned it from every side, and turned it over and over in my mind, and the more I have read about it, the more have I been satisfied that it is in the difference between imperfect and thorough culture, that lies all the mystery why some farmers make so little, and some so much. And now, in the next place, (for I must run over the subject rapidly, as in the space allotted for an article like this, we cannot be expected to cover the whole ground,) how are we to go to work, to introduce this system of thorough culture and calculation to the farming community generally.

There are two ways in which this can be done, and they are both somewhat connected, namely: By practicing it ourselves, thereby showing its utility, and by inducing farmers to think upon the subjects connected with their occupation. The first of these things is comparatively easy, but some difficulty attends the second. To overcome prejudices—to break down old systems of farming suited to by-gone days—to induce men to read and reflect about what they have always supposed needed no thought or reflection—all these and many other things are hard to contend with. But let us not despair—the object to be accomplished is a great one, and patience and perseverance will do much.

First, then, I say, let us conduct our own farming operations in a proper manner, with due regard to the fact that we wish to reap the reward of our labor and to receive the largest amount of profit upon our capital invested. Let us keep regular accounts with the several departments of our farms—the stock, crops, &c. &c.—let us calculate the cost of raising every article produced upon the farm, whether live stock, grain, or ought else—let us mark well what pays a profit and what does not. There is nothing, perhaps, in which farmers, as a class, are more negligent than in this one point, of keeping accounts. Few, so called, *practical farmers* have any idea of what number of pounds of hay a yoke of oxen will consume during the foddering season; so too of cows, horses, sheep, &c. &c.; everything is fed by guess work, and in consequence much farm produce is sold by guess work too. Merchants keep accounts, without them their business would certainly prove a failure; go to a merchant to buy goods, who has just received a supply from some city or distant country, who has not yet seen his bills or made up the amount of cost, and what will he tell you? "I do not know, sir, what to ask for those goods. I have not yet calculated their cost." But alas! what do too many farmers do? They calculate the cost of nothing. We raised this grain, say they, and we can afford to feed it out, it cost us nothing. Ah, my friend, is the expenditure of bone and muscle which that bushel of corn or potatoes cost thee, nothing? Were the drops from thy sweaty brow, with which thou watered many a hill through the long summer day, worth nothing? Other men in other occupations, live by their labor, whether of the body or the mind. Calculate then, friend, and know what thy labor is worth to thee.

I well know that circumstances alter cases, and that different systems of agriculture are suited to different sections; but I do say, without fear of contradiction, that in many sections the system generally pursued, is such an one, that without the most rigid economy, amounting even to parsimony, farmers could not live by their labor; and I attribute the fault, not to our noble calling, but to the negligence and want of calculation of those concerned in it. I have no theory to support, no selfish ends to serve; I only wish to awaken thought upon these subjects among farmers, and especially among the farmers of this section of our country. If I am wrong in my views, no man will be happier to be set right.

In regard to the question, how shall we induce farmers to think upon the subjects connected with their occupation, let me propose the following plan. I do not know of its ever having been tried, or how it will succeed generally, but perhaps some few districts at least may be benefitted by it.

Let notices be given out that monthly meetings in every school district will be called, beginning in October and ending in March; this would give six meetings during the winter. Let the district school-house be the place of meeting. At these meetings let such articles be read from the Transactions of the State Society, and from agricultural papers, as may be deemed interesting and beneficial to those present.

Some men will get together and listen to a little reading, whereas if they remained at home they would not touch a book during a winter evening, but doze in the chimney corner, or around the stove, or be at work at some manual labor, thinking they could not spare time to read a book.

Let such questions as the following be presented for their consideration: The cost of rearing stock, from the time of birth till three years old; the number of pounds of hay a yoke of oxen will consume during the foddering season; the cost of wintering, (not half starving,) a cow, a horse, a sheep, &c., &c., during the whole foddering season; the number of quarts of milk given by a good cow during the year; the number of quarts given by the same during the first week after the calf has been taken away, or four weeks after calving—this to be done by actual measurement in a quart measure, not by milking in a pail *supposed* to hold a certain number of quarts; the number of bushels of corn usually raised on an acre

in the neighborhood; same of oats, of rye, buckwheat, &c., &c., actual measurement to be taken, instead of *cart loads;* the usual value of cows in the fall; the usual value of same animals in the spring; what a farmer gets therefore, for wintering said animals; the value of each farmer's hay, stalks, grain, &c., in the fall; the value of stock in the fall; the value of his stock in the spring, after consuming his hay, grain, &c., &c.; what his cows realized for him in the shape of milk and butter, during the season; how much nett profit they make him after deducting all expenses; the number of pounds that a bushel of corn weighs each year; same of wheat, rye, oats, buckwheat, &c., &c. These, and a hundred other questions of practical value, might be proposed at the various meetings. Let a number of farmers present take three or four of these questions at each meeting, and answer them as far as practicable, at the next meeting. Some of them would require a season to test them in—they can be given out and reported upon at the next winter meetings. These meetings will act as aids to the county agricultural societies, and through their means many men may be induced to join those valuable institutions, who would otherwise give themselves no trouble about them. The various questions may one and all of them have been tested by many intelligent and reading farmers, but I am pretty certain few so called *practical* farmers, have ever taken the pains to try any of them. Let such plain questions be once fairly put to trial, and I think the result would be a mass of facts that could not fail of being greatly beneficial to the interest of the farmers in their respective neighborhoods. We would then know better than most men, how to *shape our course.* By this means, a change in the mode of farming in some districts, might be brought about, and a more profitable course than the one pursued, might be adopted. What was proved to be unprofitable in one part of our country, would be left to be pursued in another, where it could be done with more advantage.

Many other things suggest themselves, but we will leave them to the reflecting minds of those noble spirits, a few of whom may be found in almost every neighborhood, who are wrapped up in the great cause of agriculture, and whose hearts are beating with high hopes and aspirations to elevate that noble, but hitherto down-trodden calling. H. C. W. *Putnam Vulley, N. Y.*, 1852.

## Agricultural Education.

What can be done with Present Means.—While much has been said, both wisely and unwisely, concerning the establishment of great Agricultural Schools; and while all attempts towards their endowment by state funds, have signally failed—is it not well to consider what can be accomplished with existing means? The establishment of Agricultural Colleges, is certainly, on all accounts, desirable; and it is to be hoped that the friends of agriculture will rally upon their next legislatures, in full force, and carry their measures in New-York and Massachusetts, at least. But we have already the means with which to work a vast change, and one scarcely less great, than any contemplated institution could perform.

Our Common Schools are the starting point. Here let the efforts of the friends of rational husbandry commence. Are there not enough readers of the Cultivator, and kindred publications, in one-half the school districts of this state, to discuss the subject of agricultural education, in the school meetings? Let care be taken that trustees and superintendents of the common schools, be instructed to secure and encourage teachers who will instruct in scientific agriculture.

Let our County Ag. Societies secure the services of some competent person to attend teacher's institutes, and communicate instructions and enthusiasm to teachers, so as to fit them more perfectly to teach farmer's sons.

Let them also offer premiums to teachers, and classes, who shall teach and learn the most, and the best of this subject.

I should like to see such an announcement as the following from the Lewis Co. Agricultural Society:

"For the encouragement of the study of Agriculture in our common schools, the society offers the following premiums to teachers and scholars, to be awarded at the county fair, Sept. 1853.

1st premium. To each member of the class, not to exceed 10 in number, that evinces the best knowledge of Prof. Norton's Elements of Scientific Agriculture, a copy of Johnston's Lectures on Ag. Chemistry and Geology. To the teacher, Stephen's Farmer's Guide. 2d premium. To each member of the second best class not exceeding ten, Thomas' Fruit Culturist. To the teacher, Colman's European Agriculture. Classes to be examined by their teachers, before a questioning and a judging committee, consisting of D. P. Mayhew, A. M., principal of Lowville Academy, Hon. Francis Seger, and Rev. Calvin Yale, town superintendent of Martinsburgh."

Would that the quotation marks that enclose the above paragraph, were warranted! Would not such premiums give impulse to the study of agriculture? Would not as much interest be excited in such an exhibition, as in that of farm products, or of embroidery, or of plowing matches?

I cannot forbear here remarking, that the substitution of useful books, or farm and horticultural implements, for *money* premiums, would accomplish vast good in raising the tone of agricultural practice. There is no reason why farmers should not have money from other sources, and every reason why they should have good books, from such a source, embodying the experience of many, with reference to their pursuits, and which, instead of being merged into the general currency, shall always be before a man as an evidence and remembrancer of merit.

What county society will first pronounce these suggestions good, and act upon them?

Teachers who love your profession, and have zeal to honor it,—a word to you.

In "the rural districts" nine-tenths of the children you instruct are farmer's sons and daughters, full of robust health, blessing you with the beaming of bright eyes, and the joyous music of happy voices. Do you desire that they,—full of innocence and strength,—should grow up to the noble inheritance of "a sound mind in a sound body;" that they should honor the art that is the earliest and best? Be not content to let them pass into life—either the life of the farmer, or that of a profession-

without knowing the beautiful truths, which the farmer ought to know, because he is a farmer; and which the young man aspiring to a profession ought to know, that he may intelligently settle upon his course of life.

Two years ago, excuse might be urged that we had no suitable text book. But now, Prof. Norton's admirable "Elements of Scientific Agriculture," leave no place for that objection. This book has met with higher praise than I can bestow upon it, but I can say that such is its admirable simplicity of style, and so logical is its arrangement, that in the course of some considerable experience as a teacher—I have never used so satisfactory a text book on any subject.

Any pupil who can master English grammar, is capable of studying it to advantage.

It is a natural proceeding to pass from the common school to the Academy, and here should be furnished all the facilities for equipping the teacher. It is gratifying to know that several of our academies are doing their duty in this respect. Let the friends of agriculture encourage them, and put others in the right way. Saml. W. Johnson. *Scott, Cortland co., N. Y.*

## Cost of Growing Indian Corn.

Eds. Cultivator—While reading the Transactions of the N. Y. State Ag. Society for 1850, I particularly noticed some estimates of the cost of producing various crops, made by J. Delafield, Esq., in his Survey of Seneca County. Now, although these estimates may be a fair average of the cost of cultivation in the latitude of Seneca county, yet some of them may not be applicable to that of Albany county; and likewise the average cost of producing a given crop in Albany county, might vary materially from the cost of producing the same crop in some other parts of the state.

I have seen several estimates of the cost of cultivating Indian corn, per acre, no two of which I think were alike in the items or amount of expense, which shows that different individuals pursue a different course, either more or less expensive in cultivation, or in making up their accounts. *Some* neglect to put in some small items, which, though small on one or two acres, would amount to considerable when multiplied by 10 or 20; or the difference may arise from the texture and quality of the soil.

I would suggest that every farmer ought to know how much it costs him to raise a bushel of any kind of grain or roots, and what he can cultivate with the most profit. For this purpose he should have an account book, in which every field, or part of a field he cultivates, should have a place, the number of acres it contains, and all expense and labor incurred in its cultivation, even to the putting up of twine and scarecrows on his cornfield, for with the farmer as surely as with any other man, time is money; and if one hundred farmers in different parts of the state would pursue the above method, in regard to their cultivated crops, especially Indian corn, which is perhaps more generally cultivated throughout the state than any other grain, and give the results through the Cultivator, it would, no doubt, be equally useful and interesting.

I will now give Mr. Delafield's estimate of cultivating an acre of Indian corn, together with my experience with a piece of four acres in 1849, showing quite a difference in cost of cultivation; and I would observe that these four acres were some of the easiest tilled land I have, being a loam, part of it inclined to sandy and a part to clay, no stone, and having lain to meadow until the grass had nearly all run out, not turning off more than ¾ of a ton of poor hay per acre.

*Estimated cost of one acre of Indian Corn.*

| | | |
|---|---|---|
| Plowing and harvesting twice, | | $2 76 |
| Half of 30 loads of manure, at 12½ cts per load, | | 1 88 |
| Hauling and distributing manure, | | 1 50 |
| Planting, | | 1 40 |
| Seed, five quarts, | | 0 20 |
| First, second, and third hoeing, | | 1 95 |
| Cutting and stouting, | | 1 00 |
| Husking and housing, at three cents per bushel, | | 0 96 |
| Shelling and delivering, | | 0 50 |
| Interest on value of land at $50 per acre, | | 3 50 |
| | | $15 65 |
| *Product*—Thirty-two bushels at 50 cts., | $16 00 | |
| Two tons fodder, | 5 00 | |
| | $21 00 | |
| Profit per acre, | | 5 35 |
| | | $21 00 |

*My own experience.*

| | |
|---|---|
| Four days plowing, breaking up sod, at $2 per day, | $8 00 |
| Charge to this crop ¼ of 80 loads of stable manure, at 75 cts. per load, | 15 00 |
| Spreading manure, 2½ days, | 1 25 |
| Second plowing, three days at $2 per day, | 6 00 |
| Harrowing, 1½ days, | 2 25 |
| Furrowing or marking out, one day, | 1 25 |
| Seed corn and pumpkin seed, | 1 00 |
| Two men and two boys one day planting, | 2 50 |
| Cultivating for hoeing, man and horse two days, | 2 00 |
| First hoeing, seven days work, at five shillings, | 4 38 |
| Plowing for hilling, twice in a row each way, man and horse two days, | 2 00 |
| Hilling, six days work, at five shillings, | 3 75 |
| Cutting and stouting, eight days work, at five shillings, | 5 00 |
| Husking 336 bushels ears of corn, at 4 cents, (had it all husked by the bushel,) | 13 44 |
| Carting corn and stalks to barn, | 5 00 |
| Sorting and drawing to market 275 bushels ears of merchantable corn, at 2 cents, | 5 50 |
| 35 bushels hen manure, ashes, and plaster, applied after first hoeing, at 10 cents, | 3 50 |
| Labor putting on the same, and twine to keep off crows, | 1 00 |
| Interest on value of land, at $75 per acre, | 21 00 |
| | $103 82 |

| | | |
|---|---|---|
| *Product*—275 bushels merchantable corn in the ear, sold at 31 cts., | $85 25 | |
| 61 bushels poor corn, at 18¾ cts., | 11 44 | |
| Stalks for fodder, at $5 per acre, | 20 00 | |
| 50 loads pumpkins, | 20 00 | |
| | $136 69 | |

It will be observed that my four acres cost me $103.82, or $25.95 per acre; and that the product, without the pumpkins, amounted to $29.17 per acre, leaving a balance of $3.22 per acre, in favor of the crop, and by adding the pumpkins, of $8.22.

I have kept an account more or less accurate, for several years, of the expense of my corn crop, and have never seen an estimate or statement of the cost of raising an acre, which amounted to as much as I am convinced it costs me to raise it. Although it does not always cost me as much as in this instance, yet, taking the whole crop which grows on the land, I do not know that I ever raised a more profitable crop of corn. C. W. L. *Watervliet, April*, 1852.

Curing Corn Stalks.—A correspondent of the Maine Farmer places his stalks butt upwards, and then, if it rains, all the water is thrown quickly off, and none lodges between the leaf and stalk. A long storm will thus injure them but little, while in the usual way they would become completely soaked.

## The Agriculture and Marls of New-Jersey.

EDITORS CULT.—Having spent some time in West Jersey during the past winter, I propose to give your readers, many of whom are residents of that interesting region, a brief outline of its agricultural condition and facilities. The particular region of which I am best prepared to speak, is the western portion of Cumberland county.

The whole south and eastern portion of New-Jersey is an extended plain, no part rising over one or two hundred feet above tide water, and generally presenting a rolling, or undulating and wavy surface. This part of the state presents two varieties of soil—a light sand, in many places blown about by the wind, and a heavier variety, called *clayey*; it is so, compared with the still lighter soil, but a visitor from almost any other region would call this a sand, or sandy loam, containing a slight admixture of clay. The clayey portion appears to embrace a wedge-shaped tract, coming to a point at its south-western extremity, near Greenwich, Cumberland county, and widening as it extends north-easterly towards New-Brunswick, leaving a belt of barren sands on either side, upon the east, reaching to the sea-board. The agricultural history of West Jersey, as well as its military, has been rather an eventful one, and may serve as a warning to the inhabitants of many regions now commencing their agricultural career. The soil, though light, when first tilled, appears, from early accounts, to have been very fertile, save, perhaps, the most sandy barrens. But by hard cropping, without returning much in the form of manure, it was, after a series of years, reduced to a state of complete barrenness, and the lands were sold for a trifle, or left, in default of a purchaser, and the impoverished occupant found a home upon the virgin soil of the western wilds.

Many pursued this course, while a portion remained and gained a subsistence by cutting off the timber for the Philadelphia market, taking in return, pork, grain, flour, and the other necessaries of life. This course, I am told, was pursued until within twenty or twenty-five years, when the value of the land was reduced to the value of the timber upon it. Several circumstances at that time conspired to improve the agricultural condition of this region. One was the opening of the Philadelphia market by steam navigation; but the most marked impetus was given by the discovery of the *marl beds*.

These beds form a broken line along the westerly side of the clay deposit referred to, for many miles, extending at least, across Cumberland, Salem, and Gloucester counties. In Cumberland, and the south part of Salem county, the shell marl prevails, while further north, the *green sand* marl is found. These two kinds are very dissimilar in appearance, and each kind embraces many varieties of color and quality. Both seem to have originated in deposites of sea shells, and the bones of marine and land animals, the latter constituting but a small portion, and in many beds no visible trace of them is found. While in the shell marls the remains of a large number of the marine shell-fish are always present, and constitute a large portion of the main mass; bones are found only here and there, as the carcase of some sea monster happened to lie, as he was driven on to the shoals then having these *oyster beds* for their bottom. Shark's teeth are somewhat abundant, and the bones which have thus far come to my notice, appear to be those of fish and large lizzards, or saurians. It is somewhat difficult to give a correct idea of the appearance of a marl bed. Indeed, those near together appear quite different. Many are found, composed of various colors, as follows: first, and over the whole, from 3 to 15 feet of sand and fine gravel; then comes a layer of yellow marl, containing the imprints of shells which have wholly disappeared—this layer may be a foot or two deep. Then comes a strata of a dark color, nearly black, and may be thinner, or a little thicker than the yellow above it. In this are also the impressions of shells, but seldom the shell itself. Below these come the marl proper, varying in depth from a few inches, to 15 feet or more, made up of shells more or less decayed; most of them, however, readily fall to pieces on being moved or exposed to the air, yet a few in almost every bed will retain their form. Among these, the Perna, nearly as large as a horse's hoof, and several varieties of oyster, are predominant. From 60 to 70 per cent of sand is found in the best shell marl, and the mixture, when shovelled over, has a greyish appearance. Samples of all these varieties may be seen in the cabinet of the New-York State Agricultural Society. The above is only an outline of the general mode of appearance, each bed varying more or less in character. Careful analyses of these marls show the following composition:

| | *Top Yellow Marl.* | *Top Black Marl.* | *Shell Marl.* |
|---|---|---|---|
| Organic matter, ... | 6.25 pr. ct. | 5.02 pr. ct. | 2.57 pr. ct. |
| Sand,..... | 70.44 | 85.57 | 67.23 |
| Oxide of iron,..... | 16.91 | 2.50 | 4.61 |
| Alumina, ..... | 2.69 | 5.05 | 2.13 |
| Sulphuric acid,.... | .29 | .. ... | 1.70 |
| Chlorine,..... | .03 | .08 | ..... |
| Carbonate of lime,. | 2.37 | 1.58 | 13.60 |
| Magnesia,..... | .10 | .04 | .03 |
| Potash, ..... | a little. | ..... | .69 |
| Soda,.... ..... | .92 | .26 | .26 |
| Phosphoric acid,... | ..... | ..... | ..... |
| | 100.00 | 100.10 | 92 82 |

Though these results do not correspond very well with the analyses published in the report of Prof. ROGERS, on the Geology of New-Jersey, it is believed from repeated experiments, that they give an average of the composition of the different varieties, yet no two samples would precisely correspond. At the beds, the marl sells at 25 to 75 cents per load of 20 bushels; from 10 to 30 loads per acre, are applied broadcast to the soil, and generally with good effect. Many instances are given where 20 loads per acre have been applied to the worn out barrens not capable of producing over five bushels of corn, that by this dressing alone are rendered productive for twenty years, with no other manure, producing 25 to 40 bushels of corn, and moderate crops of wheat, potatoes and clover. Beside the varieties of marl mentioned, there is also a *sour* kind found in the bottoms of beds where no shell occurs. This is so poisonous as to kill vegetation where it is placed, and render the land barren for years. This marl, however, contains most of the valuable substances found in the best kinds, and is used in compost heaps by a few, to great advantage, the ammonia evolved from the fermenting mass operating to neutralize the sulphuric acid, and decompose the sulphate of iron and alumina, which are the poisonous substances contained in the marl.

By this chemical change all the substances are rendered valuable to the plant, and the volatile gases of the manure are fixed and carted to the field. Prof. Rogers suggests that *lime* mixed with the sour marls would render them valuable, which is certainly worthy of a trial.

The improvement upon lands contiguous to the marl beds, by its use, has been almost incredible, especially where care has been taken in preserving the farm-yard and stable manure. A large amount of Guano has of late been applied, with most satisfactory results—crops of wheat and buckwheat being often doubled by the application of one or two hundred pounds per acre.

Since the rot has ruined the potato crop north, this has become an important article of culture in West Jersey. The yield is not large, ranging from 50 to 150 bushels per acre—but better flavored, or fairer sized potatoes are seldom met with, the disease never having invaded that region; and at ready sales at 75 cents to $1.50 per bushel the crop is a paying one. This season many farmers are planting from 10 to 40 acres, which will doubtless find a ready market, unless this vegetable regains its health in more northern regions. What this county is agriculturally, it has been made by *improvement* alone, and with its fine climate, the growing zeal and intelligence of its inhabitants, and a good and accessible market, it certainly bids fair to become a region of great fertility. There is still much vacant land, once cultivated but now overgrown with cedar, dwarf pine, oak, &c., among which the last corn hills are still visible, that can be bought at reasonable prices, and by judicious management readily brought to a fertile condition. Without marl, by the use of guano, bones, lime, plaster, &c., valuable farms have been reclaimed from this worthless condition, and rendered productive and beautiful. Gurdon Evans, A. M. *June*, 1852.

### Wool Growing in Michigan.

Editors Cultivator—In looking over the former numbers of the Cultivator, I notice that Mr. Pettibone throws down the glove to the whole west, for raising sheep and wool. Now we have no wish to disparage either the luxuriant pastures, or the good management, of our Vermont brethren, but we should be happy to let them and others know the advantages we do possess.

These advantages are found in our soil and climate. Our soil is a mixture of silica, of carbonate and phosphate of lime, of organic principles, with a small proportion of sulphur, iron, &c., constituting all the earths and metals necessary to give a rich and nutritive vegetation. On our Burr Oak plains and oak openings, which cover a large proportion of the peninsula, the heaviest rains are quickly absorbed by the earth, giving sheep and other animals a dry, healthy surface on which to repose. On the other hand, a mellow fallow, kept clean of vegetation, absorbs moisture from the atmosphere, and never becomes dry and hard, as I have seen in New-England. We have more lime diffused through our soil, than in any of the states east and south, to the Atlantic, and the Ohio River, and doubtless more than in the prairie states to the west.

But it is mostly in our climate that our advantages consist. The radiation of the caloric, (heat,) from the vast bodies of water, surrounding us on all sides except the south, renders our climate more mild than any part of the United States of corresponding latitude, east of the Rocky Mountains. Northern Ohio, though south of us, has more snow. Kentucky and Western Virginia, I have been told by persons who have resided there, have, for snow and cold weather, quite as severe a climate as we have in Jackson county; but their springs are earlier. It was stated some time since, in a newspaper, that at a certain time, the thermometer, on the Wisconsin side of lake Michigan, stood at 16° below zero. On the Michigan side, at the same time, 3° below; wind not noticed, but direction probably from west to east. We have a less amount of water falling in rains in Michigan, than at the east. This the topographical situation of our state indicates, and experience proves to be a fact. Our straw stacks in this wheat growing region give us some advantages, as sheep will do better with a change of straw, than confined wholly to hay. The less amount of rain, with the excellence of our soil, causes our feed to be rich for fattening purposes. Where small flocks have been kept, thirty pounds of tallow from a grass fed wether, have frequently been taken. But the question will be asked, how long must you fodder sheep in each winter, in Michigan? Having lived here 17 winters, I think that in four out of five winters from two to six weeks foddering may be necessary, where there are reserved lots for winter pasturage, or where the meadows or summer pastures, will afford feed. The other part of the winter they will do better on pasture, being housed at night, than on any description of dry feed. R. Watkins. *Napoleon, Michigan, June* 4, 1852.

### Wens.

Mr. Tucker—I sent you a communication, which appeared in the March number of the Cultivator, for 1851, respecting a wen, on the jaw of one of my cows; and doubtless, many of your readers are anxious to know what finely became of the poor creature.

After the March number was issued, I received a private communication, from Mr. Watson, in which he gave me some information, in regard to the treatment of different kinds of wens; and from what he wrote me, I soon came to the conclusion that my cow was a "goner." But, as she had a young calf by her side, I concluded to let her raise it, if possible; although I often thought it would be an act of humanity, to knock them both in the head; for the calf by sucking her milk, emitted an effluvia as offensive as the wen itself.

This wen was attached to, or appeared to be an enlargement of the jaw bone; and it was with great difficulty that she could eat. Fed with potatoes, she did much better than when fed with other roots. When fed with turneps and corn meal, her wen would assume an angry, inflamed appearance, and smell very offensive. I discontinued the application of caustic potash, as it would increase in one day as much as a daily application of potash would diminish it.

As soon as there was a supply of grass, I turned her into the highway to "live or die." But to my great surprise, she soon improved in flesh, so that it was thought best to take her into the pasture. About the first of

September, I commenced feeding her with pumpkins and meal. To the astonishment of every one, she deteriorated until she became a skeleton; and about the first of October I killed her and took her hide. I examined, with much care, the diseased part; and often wondered *how she had lived at all.* I thrust a knife into it, and found it was a gristly, cartilaginous substance, full of little vesicles, containing blood and water. I forced the knife in another part of it, and a viscous, yellow ichor, issued out. Her grinders, on the diseased side of the jaw, were more than an inch longer than those on the opposite side. When they shut together, her mouth would be open about two inches. This accounted for the fact that she always carried her jaw on one side. I had often noticed that she performed mastication by moving her jaw from right to left, horizontally, without any vertical motion. This movement of her jaw crushed the food between the *sides* of the teeth, which I found were much worn away.

In conclusion, allow me to remark, for the benefit of any one who may be so unfortunate as to have a wen on any of their animals, that they should be prepared for the butcher without delay. Had I known *then*, what I know now, I should not have lost twenty-five dollars needlessly. Truly yours, S. EDWARDS TODD. *Lake Ridge, Tompkins co., N. Y.*

### Farmer's Talk.

EDS. CULTIVATOR—If there is any one class of citizens and laborers that I feel an interest in, more than another, it is the farmers. If I were asked the reason of this feeling, I should answer, it is because I am, myself, one of that class.

It has been often said by agricultural writers that farmers, as a class, are the least intelligent and poorest educated of any, and it often seems that we have the least influence and are the least respected. Whether this idea be correct or not, may be of no particular consequence in itself; yet, if such be the case, it is well to inquire whether, as farmers, we have not something to do in this matter.

It is certainly remarkable to notice what a small amount of useful knowledge, we can content ourselves with. The reason of this is, that our present wants must be satisfied and the future cared for, while the mind is left to starve. The great object of life appears to be to make money and buy more land. The life of an American farmer has always been and must ever be, one of labor. This law of labor we cannot alter, and we would not if we could, because it is just and right. Yet I am satisfied that the mass of farmers labor a great many more hours in a year, than is necessary, because they do not work to the best advantage. We do not combine half enough of genuine head labor with our hand work, and for the ostensible reason that we can get along just as well without it. But it is not enough that a farmer can improve his soil so as to make it profitable, for hundreds of farmers do that, who possess an amount of general knowledge which every good citizen ought to be ashamed of.

There is a principle beyond all this, which every farmer ought to recognise, that is, to adopt improvement for improvement's sake. Not so much to gratify a selfish and penurious appetite, as to refine and enlarge the generous, noble feelings of the *man*. Like all other classes of men we are in pursuit of happiness, and one of the most common methods of seeking it, yet by far the most unsatisfactory, is in the pursuit of wealth.

One of the best antidotes for this restless, craving feeling, is to seek for and cultivate a contented mind, but not a dull and sluggish one; for with all the followers that "Ignoramus" has had from time immemorial, he has never succeeded in making a single person rationally happy and contented. I believe firmly that the occupation of the farmer is better calculated to ensure real enjoyment than any other business. Still there are hundreds of farmers who live a toilsome and complaining life because they do not labor for the right objects.

I am well aware that it must be the farmer's general rule to carry on his business for profit, and I find that those farmers who adopt the most improvements, both useful and ornamental, are the ones who succeed best and make the most money.

We have often to struggle against poverty, but this should not discourage us. Honesty of purpose, with an indomitable perseverance and energy, will eventually accomplish anything. We may safely depend that in industry and the improvement of the mind, we are laying the foundation for future good and real success. L. DURAND. *Derby, Ct.*

### Things I have Seen.

1. I have seen farmers, who neglected to mend their fences in the spring, till after planting, and allowed their cattle and other stock to ramble about, till they had no control over them, which nine times ont of ten will make them unruly.

2. I have seen farmers pasture their swine in the highway, without a yoke or a ring in their nose, greatly annoying their neighbors, by turning up the turf before their dwellings, ready to enter the door-yard or garden whenever there is a bar down, or a gate open, or a hole in the fence, forgetting the golden rule, "whatever ye would that men should do to you, do ye even so unto them."

3. I have seen farmers let their best land grow up to briars and weeds, and remain from year to year encumbered with all manner of trash, thus fulfilling the proverb, "I went by the field of the slothful and the vineyard of the man void of understanding, and lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down."

4. I have seen farmers who had a tolerable theory of farming in their heads, but not the first principle in practice, and were like the Scribes and Pharisies, "for they say and do not."

5. I have seen farmers who thought it wicked to cultivate a fine garden, shrubbery, ornamental trees, flowers, or anything to make their homes pleasant and inviting, not discerning the hand of the Creator in all the works of nature—but who esteemed it no sin to suffer their children to grow up in idleness, roving about with no taste for anything pertaining to home.

6. I have seen farmers who let their tools remain in the field in all weathers, and during the winter, saving a great deal of time in not carrying them to and from their store houses, it is true, but forgetting the old maxim "a penny saved is as good as two pence earned."

7. I have seen farmers who knew enough of farming without reading the Cultivator, and could not afford to take it, but who were able to pay for a novel, or some trash paper of the day.

8. I have seen farmers, who were very officious in their neighbor's business, and strange as it may seem, neglected their own. GEO. CARGILL. *Berkshire, N. Y.*

### Osage Orange Hedges.

The Machura aurantica, or Osage Orange tree, is found in portions of upper Texas, Arkansas, northern Louisiana, and the southern portion of the Indian territory, in a native state; and, in point of appearance, closely resembles the orange tree. It bears a large and beautiful fruit, which is remarkably tempting in appearance, but it is perfectly useless for man and beast. The foliage somewhat resembles that of the peach, but of a richer and more transparent green, and, in many respects, it may be ranked among the most splendid of the forest trees. Its growth is uncommonly prolific, so much so, that on a rich vegetable soil, it will throw out branches varying from three to ten feet, in a single season. The growth is so rapid, whilst the plants are young, that it matures its wood imperfectly; so much so, indeed, that in the center of each stalk of young growth, a pith is formed, closely resembling that of elder. Yet this influence does not extend beyond the second year's growth, and as the wood perfects itself, it becomes nearly as hard as lignum-vitae, and is as incorruptible as the cedar. In its native clime, it ordinarily makes a growth of fifty feet in height, and, when grown separately as standard trees, will girt, at maturity, from eight to ten feet, four feet from the ground. Saw logs three feet in diameter, are frequently cut from this tree along the valleys of the Osage river; and the wood, though difficult to saw into lumber, and work with edge tools, is highly prized, from the fact that it not only makes a beautiful quality of furniture, but will take the highest and most perfect polish and finish. Among the other peculiarities of this splendid tree, its limbs are densely covered with thorns, so sharp that no animal can safely come in contact with its foliage; and owing to this peculiar quality, it has recently been introduced as a hedging plant, and the adaptation and management of which, demands a somewhat critical notice at this particular crisis.

Being pretty thoroughly acquainted with the management of the English hawthorn for hedging purposes, which is known to be a dwarf or shrub, it was natural to look upon the introduction of a large class of forest trees for a hedging plant, with doubtful forebodings; and the more we investigated the subject, the more convinced we became, that those who planted largely for fencing purposes, would ultimately have reason to regret it. The objections frequently urged on our part, against the osage orange hedge, are clearly indicated in the description given of the habits and character of the plant, at the head of this article; and although disposed to condemn the whole *mania* as a modern humbug, yet the importance of introducing a successful system of hedging, became so apparent, from the great scarcity of fencing timber in many of the oldest states, and on the western prairies, that we were inclined, against our supposed better judgment, to look favorably upon a movement, that would either prove to be a great curse or a blessing to the agricultural community. The rapid and enormous growth of the tree; its tendency to throw off lateral branches in nearly a horizontal direction; the unsoundness of the wood at its heart, the large expense that would have to be incurred in keeping the hedge in proper shape and limits; the aptitude of the plant forming a standard tree, in spite of the numerous trimmings and prunings that may be employed, to convert it into a dwarf; and the natural tendency of the lower limbs and branches to decay, are among the prominent reasons that prompted us to look coolly on at the movement for extending the propagation of the Maclura for hedging purposes. The beauty of the plant, and its powers of resistance for fencing, aside from our apprehensions of its ultimate failure, prompt us to acknowledge that we are daily becoming more hopeful that the ardent friends of the speculation, may realise their most sanguine expectations. Entertaining none but the most kindly feelings toward those who are engaged in the propagation and sale of Osage Orange plants, we shall without further criticising their qualities, take a more practical view of the subject.

The seed are gathered mostly by the Indians, in northern Texas and the Indian territories, and with much difficulty and expense are separated from the pulpy parts of the fruit; and its value ranges from $20 to $40 per bushel. Its appearance resembles cucumber seed, and a quart of sound seed will produce 5,000 plants. These plants of one year old, command a price ranging from $5 to $10 per 1,000, which will plant nearly one mile of fence, placing the plants a foot apart in the rows, or a half a mile if planted in a double row six inches asunder, and a foot between each plant in the row, making them alternate, so that plants will be only six inches from each other, in the direct line. Double rows for small enclosures, are thought better than single ones, even supposing that it took an equal number of plants to make the hedge, on account of the closeness that the bottom of the hedge row may be made, when it presents a broad base of thrifty growing young plants. On the prairies of central and southern Illinois, the propagation of the osage orange plant for hedging purposes, has been engaged in more extensively than in any other portion of the union; and latterly, the practice of planting only one row and placing them a foot asunder, finds favor among the practical farmers generally.

The seed are somewhat difficult to germinate, and the practice almost universally adopted, is to scald it with hot water, before being planted in drills, and after being thus treated it is put into a cask or vessel, and allowed to remain in a damp condition for twenty-four hours before being planted, by which treatment it will come up regularly, and if the seed be of good quality, but few will miss in producing healthy plants. The seed should be sown two inches apart, in rows, about eighteen inches asunder, and the horse hoe or cultivator by being passed between them, about three times in the season, will thoroughly free the ground from weeds, and a simple and cheap process of cultivation of this kind, will, in ordinary cases secure a fine growth of plants the first year, averaging two feet in height. The period for planting seed may be safely delayed till the ordinary season for planting corn, but no precise time appears necessary, as the plants are hardy, and early planting answers a good purpose providing the soil be warm, and the sun has power sufficient to push forward a healthy growth; and in 40 degrees north latitude planting has frequently been done as late as the 10th of June with admirable success. The hedge row, previous to setting out the plants, should be brought into a high state of cultivation by frequent plowings and harrowings, and a neat furrow may be made with the plow in the exact line where it is intended to plant the hedge. The planting may then commence, and by placing the plant along perpendicularly against the furrows, the plow may again be employed in covering the roots, and in the hands of an expert workman, the work may be as perfectly done as if the spade alone were used. The first year the only thing requisite to be done, would be to keep down the weeds by working the land some three feet each side of the row with a plow and cultivator, for the purpose of subduing weeds and grass, and bringing the soil into a perfect state of tilth, so as to secure a luxuriant and rapid growth. Some adopt the plan of heading down the plants even with the surface, the first season they are removed to the hedge row, and when this is done, they push forth a stunted growth, and the object sought for is not so perfectly attained, as if they were left unmolested till the spring of the second year. The great thing to be accomplished in rearing an Osage Orange hedge, is to get a thick and thrifty growth near the ground, and this may to a certainty be obtained by cutting down the plant the second year, before the leaves make their appearance in the spring, quite even with the ground, and by covering the stubs with about two inches of finely pulverised vegetable mould, each plant will send forth some six or eight shoots, which, in an average of cases, will attain four feet in height during the succeeding summer. The third year, a sharp pruning hook may be used to head it down some thirty inches from the ground, and the fourth year the hedge will form a perfect protection against all kinds of stock, and even the smallest bird cannot pass through it without risking its life. In a wood country, where land is valuable, and timber is of but little consequence,

the hedge may be trimmed every spring for the purpose of keeping it in proper limits, and in fact it appears absolutely necessary to attend closely to this matter, where the farm is divided into fields of from ten to twenty acres each. The method of planting, trimming, cultivating, and heading down, may be varied to suit the taste and convenience of the owner of the hedge; and the one here adverted to, is adapted for those who may engage extensively in the business. Each cultivator has plans and views of his own; but the system here recommended will be found to answer all practical purposes, and will be considerably cheaper than the common plans in use.

There can now be no question, but that the Maclura will answer an admirable purpose for hedging on the extensive prairies of the west; and if it should so turn out that it would not bear the requisite prunings, for a timbered country, yet on this account it should not be rejected on extensive prairies. It would be no objection, but rather an advantage to the prairie farmer, if the hedge grew 30 feet in height. A hedge of this kind, if made to grow thick at the bottom, will not only prevent the possibility of every description of animals that would do damage to the crops, from passing through or over it, but it would have a salutary influence in protecting the crops of grain and grasses, and vegetables, from raking winds and storms, and in an especial manner would it relieve a prairie country from its frightfully monotonous appearance. When allowed to grow some 25 to 30 feet in height, the timber would become very valuable for posts and other purposes, and if cut down close to the ground, so that the stumps may be covered with fine mould to protect them from the sun, a prodigiously thick growth would spring up, which would form a perfect hedge the second year. The plant being tap-rooted, to a remarkable degree, no danger need be apprehended of its spreading over the ground like the locust, cotton wood, and other varieties of forest trees, that are noted for their rapid growth and early maturity. In consequence of this habit, may be attributed the extraordinary tenacity of life which peculiarly stamps the character of this tree. Indeed, in planting a hundred thousand young trees, there is no necessity of calculating one in a thousand, to fail in growing, and on this account a perfect uniformity in the appearance of the hedge may be kept up, and defective spots will rarely occur.

The conviction that the Osage Orange plant, is all that has been recommended for fencing purposes, has taken a strong hold of the public mind in central and southern Illinois, Missouri, southern Iowa, Indiana, and Ohio, and it is to be hoped that the most sanguine expectations of its warmest advocates may be more than realised. It will flourish in any latitude or climate where the peach will grow successfully in open culture, and even if the top limbs should become damaged slightly by frost, it would only tend to make the hedge grow more thickly at its bottom.

Professor Turner of Jacksonville, Illinois, has this year THIRTY FIVE ACRES OF PLANTS, which through the active exertions of travelling agents, will be thrown into market the ensuing spring, from which the proprietor will reap a golden harvest. A vast number of others are engaged in the business, and having the best feelings for all interested in the speculation, we shall, for some time to come, watch with interest the final result. G. W. EDMUNDSON. *Keokuk, Iowa.*

### History of the Short-horns.

It seems necessary to make some reply to the article of AMBROSE STEVENS, in the Cultivator for July; but I will, in so doing, occupy as little space as practicable.

1. The charge against me of misrepresentation. I said that Mr. Stevens had admitted, by implication, that Sir James Penniman's and Sir Wm. St. Quintin's stocks of cattle came from Normandy. The grounds of this statement are these: In Mr. Stevens' article in the *Transactions* for 1849, he said the family of Aislabies came from Normandy, and that this family had these cattle. He did not say where they obtained the cattle; hence I remarked that the most natural inference would be that they were Norman stock. This inference is rendered *more* natural, from the fact that Mr. Stevens admits the stock of Sir James Penniman to be the same as that of the Aislabies. In his article in the *Transactions*, he says "the Pennimans of Ormsby, in Yorkshire, procured cows and used bulls from Aislabie." He now says he "did not mention St. Quintin or his cattle." But I showed that what he said of the identity of the Aislabie and Penniman stocks was enough, and that by this we had a key to understand what this Aislabie stock really was. I then showed by extracts from the English Herd-Book and various other writings, that *Sir James Penniman obtained his celebrated cattle of Sir Wm. St. Quintin*, and that they were deemed of Norman extract —or had more or less Norman blood. Thus proving that the Aislabie and Penniman stocks, (admitting Mr. Stevens' statement that these two were the same in blood,) were the same as the St. Quintin. Mr. Stevens' own language in regard to the Aislabie family and their cattle, coupled with the fact that stock which he admits to have been the same, was deemed as more or less Norman in blood, furnished the ground on which I used the expression of which he complains. The public will judge whether there is any misrepresentation.

2. Mr. Stevens says the English Short-horns have had no connection with the Short-horns of the Continent since 1600. In what he calls "corrections of Mr. Berry, and further Historical Notices of the Short-horns," he alleges, to prove this position, that a statute of Parliament prohibiting the introduction of cattle, was passed in 1666, and continued till 1841, and "was *always enforced*, except from 1801 to 1814."

I noticed this statement on a former occasion, in reviewing his "corrections," &c., and remarked that although I had then no information in regard to the existence of such a law, it was evident from the testimony of many of the most reputable authors, that there was no such barrier to the introduction of cattle into England, as claimed by Mr. Stevens. I cited Youatt, Berry, Martin, Culley, Bailey, and Low,—all of whom admit, and most of whom assert, positively, that cattle were imported from the Continent during the time when Mr. Stevens says no importation could have taken place.

It might be thought sufficient to simply array Mr. Stevens' assertion against these acknowledged authorities. But I am happy to have it in my power to give more direct and important evidence on the subject, for which I am indebted to B. P. JOHNSON, Esq., Secretary of the New-York State Agricultural Society, who did me the favor to make the necessary examinations, during his visit to England last year as Agent from the State of New-York to the great Exhibition. He says—

"In 1666, (Charles the 2d,) a law was passed, prohibiting the importation of cattle from Ireland and foreign countries, (except the Isle of Man,) from the second day of February, 1666, for the term of seven years, and until the end of the first session of the next Parliament.

"This act expired, and in 1680, (32d of Charles 2d reign,) was revised and made perpetual, with this express provision—'That any cattle that are or shall be in England *before* the second of February, 1680, shall not be liable to forfeiture.'

"The preamble and title of both the above laws show, that the importation of cattle from abroad, was considered a great detriment to the farmers of the kingdom of Great Britain, and these restrctive measures were resorted to, in order that encouragement should be afforded to the rearing of cattle among themselves.

"In 1670, (19 and 20 Charles 2d,) a law was passed that after June 24th, 1671, it might be lawful for *foreigners* as well as Freemen, to buy and sell any 'cattle in Smithfield market—any custom or usage to the contrary notwithstanding.'

"In 1685, the foregoing act was continued in force for seven years.

"George 3d, 10th, an act was passed to *prevent* importation of cattle from abroad, on account of the 'contagious disease' IN EUROPE—the law to continue in force to 1771, (two years, I think,) and in 1772, it was extended to 1774, as the disease still continued.

"This shows that *cattle were imported at that time*, or else these laws would have been entirely nugatory.

"In 1772 a law was passed for seven years, giving full liberty to import cattle from *Ireland*, which had been prohibited by the law of Charles 2d. And in 1776, the above act was made perpetual. (There had been no prohibition between the *Continent* and Ireland during all this time.)"

It is unnecessary to add a word to the above explicit and authentic facts, to show that no such prohibition existed as is asserted by Mr. Stevens. The statement of various historians, therefore, in regard to the importation of cattle into England at different periods "since 1600,"—and that some of these importations contributed to the improvement of the Short-horned breed,—remains unshaken by Mr. Stevens' attack.

3. Besides asserting that the English Short-horns have had no connection with the Short-horns of the Continent since 1600, Mr. Stevens says: "*as a breed* they are and *ever have been pure*; and *all* Short-horns recorded in the Herd-Book are purely of that kind, except such as have the Scotch Galloway blood, introduced by Charles Colling."

There is an ambiguity about the expression "*as a breed*." It may mean that though some animals of the breed have been crossed, all have not. This is no doubt correct. But can it be possible that Mr. Stevens means to say that *all* Herd-Book Short-horns are of *pure blood* except such as have the Galloway cross? If so he has probably obtained some light on the subject within a short time; for without adverting to other examples, it is presumed he will not deny having said that at least two bulls sent to this country by a late noted Short-horn breeder, and "recorded in the Herd-Book," had West Highland blood in them! Sanford Howard.

### The Bingham Sheep Shearing.

Eds. Cultivator—On the morning of the 18th May last, we left the village of Middlebury, on the Rutland railroad, to attend an agricultural festival, at the residence of one of the well known farmers in Vermont. It was a bright clear day, and our road for some miles lay along the top of the gentle acclivity, which separates the valley of Otter Creek from that of Lake Champlain. The prospect from this ridge, embracing as it does, the windings of the gentle river, skirted in the distance by the mountains on the east and south; and on the west undulating from hill to valley, each rising upon the other, till it culminates at eighty miles in the lofty peaks of the Adirondac, renders the town of Cornwall one of the most beautiful and picturesque spots in the whole country. The valleys on either side were highly cultivated, and dotted at intervals with frequent cottages, whose white fronts and neat enclosures, contrasted strikingly with the deep green of a luxuriant vegetation.

On arrival at the place of our destination, we were cordially received by A. L. Bingham, the host of the day, a plain practical farmer, justly worthy of praise for the intelligence and enterprise, with which he has introduced important improvements in several kinds of agricultural stock, and more particularly in French Merino sheep. One object of his festival was to exhibit these sheep at the time of shearing. A large collection of people from the surrounding country, and some even from distant states, had already gathered to attend the party and witness the shearing. A big barn had been cleared and prepared with seats, from which a half dozen shearers might be seen busily employed in removing the fleeces from the heavily laden sheep. A committee of gentlemen was appointed to take the weight of the body and of each fleece as soon as sheared.

The first day, (for the festival was of two days continuance,) was devoted to the shearing of yearling ewes, of which the committee reported thirty three had been shorn. From their report we learn that the heaviest weight of body was 112½ lbs., and the heaviest weight of fleece was 21 lbs.; and the lightest weight of body was 82 lbs., and the lightest weight of fleece was 13¾ lbs. Fourteen of these yearling ewes sheared more than 17 lbs. to the fleece. The average weight of the ewes was about ninety-one pounds, and the average weight of their fleeces, a little over seventeen pounds. We also saw the shearing of a two-year-old buck, and saw the fleece weighed. The buck weighed 183 lbs., and the fleece twenty-five and a quarter pounds.

A capital and abundant dinner was provided, near a beautiful maple grove in the open fields, for all the visitors, by the hospitable host, during the partaking of which, a large and well cultivated band discoursed most eloquent music. Several hundreds found at the table ample satisfaction for the wants which the clear bracing air, and the drive and ramble through the country had, by dinner time, made decidedly imperative.

After dinner we took a stroll through the grounds and examined the numerous specimens of stock which fell under our eye. We saw a flock of French Merino bucks which had just arrived from the pastures of Victor Gilbert in France, and which seemed, notwithstanding their long voyage, in excellent order and quite at home in the new world. We also saw a three year old buck, raised by Mr. Bingham, and which weighed 292½ pounds! At another place, quite unconscious of his honors, and chewing his cud like an ordinary sheep, stood the celebrated buck *Napoleon*, which took the silver cup at the American Institute, and the prizes at the state fairs of Maryland, Pennsylvania, and Ohio. This giant was relieved of just eighteen months growth of wool on the 11th of May last, and the *fleece weighed forty-seven pounds.*

Passing on, we encountered among other cattle, a Durham calf, not then a year old, which weighed *fifteen hundred pounds;* and Mr. Bingham's other Durhams, with beautiful specimens of Herefords, and mixed breeds of divers sorts were presented, and particular among worthies, was the Hereford cow "Fanny," pronounced by competent judges, the best in the United States.

Returning to the house, we found numerous elegant horses, with trotting gigs attached, which the neighbors from Cornwell and adjoining towns, had trotted out for inspection. These were regarded as the crack horses of the country round about, and were mainly coal-black, small, but compactly built, and highly spirited animals. One of them we agreed, was the most elegant animal we had ever seen. They were mostly the progeny of a noted horse owned in the vicinity, by David Hill, Esq., and known as "Black Hawk."

As evening came on we reluctantly left the place of our cordial entertainment, and in the rays of the setting sun, bid farewell to a scene and a day vividly impressed on our minds as one of the most interesting and peculiar we had ever experienced.

We had read of the games and festivals of bye-gone ages, when some old baron would collect together his vassels and his serfs, and on some broad green, broach his puncheons of ale, and disseminate his beef—and now here had been reproduced a similar gala day—but under what different auspices, and for what different uses! A noted farmer invites in all his friends; throws the door open for strangers; gives and receives information; exemplifies his views by his productions; extends his acquaintance; knits his friends closer around him; breaks up prejudices, and creates a festival, which, while it results in benefit to himself, cannot fail to contribute something to the agricultural advancement of his neighbors, and the general promotion of the farming interest. We regard the example as eminently worty of imitation. Viator. *Vermont*, 1852.

Paint for Wire Fences.—The chief advantage of painting the wires white, is to prevent their becoming so much heated by the sun's rays, and consequently expanded and slackened. Prof. Mapes says the best white paint is a mixture of white oxide of zinc with gutta percha, rubbed on while the wire is kept hot by means of a "small lamp." It strikes us that a *very large* lamp would be indispensible to even a tolerable degree of expedition—would it not be better, to heat whole coils by a fire? Is this a cheap or a costly paint?

### Notes of a Tour in France.—No. 3.

The annual sale of sheep from the government flock at Rambouillet, being advertised to take place on the 27th of April, I made my arrangements to accompany my host, Mons. G. and his son, to a friend's house the day preceding, and thence to drive over to the sale the next morning. As is invariably the case, the auction was on Sunday; that day being chosen in France for all such public occasions. Church going on any *particular* day is no part of a Frenchman's creed; but is usually left to the female portion of the household, who go to mass, whilst their liege lords go to market or fair. This no doubt arises in part from the churches being open *all* day and *every* day. The passers by drop in and patter an "ave" or "credo," cross themselves, and go on their way rejoicing, entering the church as carelessly as they would a cabaret; not but what there are many sincere worshippers at these ever open shrines. Many a tired wayfarer kneels there, and lays aside for a moment the cares and burthens of life, to rise up strengthened and refreshed for his daily toil. But ever since the revolution of 1799, the French, as a people, have been very lax in their religious principles.

But to return, the sale is always looked forward to with great interest by all Merino breeders in France, who make it a point to attend. Besides seeing the results of the year's breeding in the government flock, and comparing it with their own progress, they there meet all interested in their particular pursuit, compare notes, make exchanges, sales, &c., &c. It is also important in a pecuniary point of view, for as prices rule at Rambouillet, so they rise or fall throughout the department, (except perhaps in the case of one or two leading breeders.) Foreign flock-masters or their agents are generally represented there, and many of the best animals are often bought at a high figure to cross with the vast flocks of central Europe and southern Russia. On the present occasion some Englishmen from the far away island continent of Australia, were spirited bidders, and bought no less than 28 rams to send to Sidney, risking the dangers and losses of a six months voyage. But they told me "that they were so delighted with the sheep, that they could not help buying, forgetting expense, risk, distance, everything." I observed, however, they bought none of the highest priced sheep; thinking, no doubt, that even an ordinary ram of this heavy fleeced variety, would greatly ameliorate and increase the yield of the New South Wales flocks, which now produce a fine but light fleece; whilst the loss in case of accident would be much less.

It was raining as we drove through the narrow streets of the old town of Rambouillet. The quaint irregular outlines of the buildings, so unlike the prim stiffness of our country towns, looked gloomy enough against the dull horizon, whose leaden hue gave little hopes of a fine day for the *sale*. A dragroon with dispatches dashing hastily along, and a few peasants clattering by in their clumsy wooden shoes, were the only living things to be seen. Here, as in many of the provincial towns in France, the march of improvement has been but slow. The streets have no sidewalks, but the gutter runs through the middle of them. They are lighted at night by lanterns, suspended from cords that stretch from side to side, passing over a pulley in the walls. It was these *convenient* cords that gave rise to the terrible cry of the mob, so often heard during the first revolution, "a la lanterne!" which meant, hang the offender to the nearest lantern rope. A sharp turn to the left, under the gateway of the inn, soon changed the scene. The yard was filled with vehicles of all sorts and sizes; from the heavy modern cabriolet of the neighboring proprietor, to the almost antideluvian conveyance of some village mayor a dignitary corresponding to our justice of the peace. Horses were neighing, biting, kicking, and plunging, blue bloused hostlers were shouting and swearing and bringing very little to pass; and white aproned waiters were rushing across the yard from the kitchen to the dining room, threading their way through the crowd with marvelous dexterity. Amid this babel of sounds, we alighted and made our way into the "salle a manger;" my conductors, on their entrance, were assailed by a volley of welcomes, questions and remarks from the large party, to most of whom they were known, who were busy doing justice to the ample mid-day meal, called by them breakfast; and we were at once invited to join them. This breakfast is a most substantial repast, answering very well to our dinner. It begins classically with eggs, and ends with fruit, "ab ovo usque ad mala." There are several courses of meat, and it is always accompanied by wine. The usual hour in the country is between eleven and twelve, before which time nothing is taken but a bowl of coffee or chocolate, and a slice of toast on first rising; so that one is quite ready for the somewhat elaborate and late *breakfast*. Dinner at five or six o'clock only differs in beginning with soup.

The appointed hour having arrived, we started for the sale; and after some bargaining with a huge red-faced woman, who seemed possessor of all the horses and carriages in town, we were packed into a sort of omnibus drawn by one horse, to the number of a dozen, and slowly dragged up to the national establishment. Any but a Norman horse, would have given up in despair at the first pinch of the steep ascent; but the sturdy little bay, at an encouraging word from his driver, settled into the collar and tugged manfully on, and at length mastered the muddy, slippery hill, and landed us safely at the gate. This journey he repeated many times during the day, without apparent distress.

The auction is held under a large shed, open on all sides, supported by massive stone columns. Beneath this the sheep to be sold are placed in lots, for the convenience of being examined by the purchasers. In the middle a space is railed off, on the outside of which the bidders stand; into this area, the animal designated by his number, (which is branded on the horn,) is brought, and led around by one of the shepherds. No particular order is observed in putting them up. A clerk and accountant at a side table, record the number, price, and purchaser. All sales are for cash.

Mons. PICHAT, the then director of the flocks, was present, though having nothing personally to do with the sale. His duties end with the selection of the sheep to be disposed of. This being a government affair, every

detail and process, though liberal and exact, is slow and cumbrous. A committee is appointed, who come out and examine the selected sheep, and report to the Minister of Agriculture, who then authorises the Director to to sell them. To procure particular sheep not in the lot, would require almost as much diplomacy and management, as to get a cabinet appointment! Usually, both rams and ewes are sold, but this season none of the latter were disposed of, as it was intended to increase the breeding flock. Every thing pertaining to the actual business of the sale, was very quietly and rapidly done, and in three hours the whole fifty-two rams were sold, and the company dispersed, except those, who in spite of the weather, stayed to visit the establishment, which is always open to inspection. The prices realised were high, and the foreign bids so large, that only seven rams were sold to remain in the country!

The whilom *royal* flock of Rambouillet, it is well known, was imported from Spain in 1786. The sheep were selected from the best and most celebrated flocks in Spain, reference being had to the various distinctive excellencies of the different families that then composed the elite of the Spanish sheep; as it was intended to produce a breed that should *unite* the best qualities of all of them in *one* animal! Neither pains nor expense were spared, to have them worthy of their royal destination, and their descendants prove how successful must have been the choice. Up to the period of this importation, agriculture, and especially the breeding of domestic animals, was at a very low ebb in France; and this was a most laudable attempt of LOUIS XVI to improve the character of his wool bearing subjects. There had been at least one previous importation of Spanish sheep, towards the early part of the 18th century; but so slow was the progress of the *new* breed, that when the Rambouillet flock was established, little or no improvement had been made. Even now, after the lapse of more than half a century, the numbers of the improved breed is inconsiderable. Within a few leagues of Rambouillet, there are thousands of sheep bearing little and coarse wool, seldom reaching fifty lbs. live weight, and only fit for mutton. The district they inhabit, it must be allowed, is poor and rugged. Their fair is scanty in summer, and they live by browsing in winter. The mutton, however, is high flavored, corresponding to the Welsh mutton so much prized by English epicures; and when bought by the feeders, as they are occasionally, and put into good pasture, they fatten kindly.

All the buildings and arrangements at Rambouillet, are very complete. The large sheep-houses are of stone, and built with every reference to the health and comfort of the sheep. The farm, however, connected with the establishment, is quite poor in quality, the land being very light. The Director is appointed by the government, and he is often changed, which militates somewhat against the regular improvement of the flock, though its even and distinctive character speaks well for the scientific course of breeding that, through a series of years, has so thoroughly and advantageously amalgamated the heterogeneous materials obtained from the various Spanish flocks out of which it is formed. In-and-in breeding, and the occasional rule of an imcompetent or prejudiced Director, have prevented this admirable flock from equalling those which, sprung from the same sources, have been the property of private individuals. The prominent characteristics of the national flock may be shortly sketched as follows. They are of fair size, (though smaller than the best class of French Merinoes lately imported into this country,) with almost as much symmetry as the South Downs. The ewes, especially, are not much wrinkled, though well wooled on the face and legs. The fleece is fine and very close, but the staple is rather short, making the yield less than that of the before mentioned sheep. They are, on the whole, a very beautiful flock, but less imposing and superb than those of either Mons. GILBERT or CUGNOT.

After a short chat with Mons. PICHAT, and a hasty glance at the various portraits of sheep which form a regular and instructive series from the first introduction of the breed up to the present day, we took our leave, and drove back to our friend Mons. CUGNOT, where a party of eighteen staunch Merino breeders sat down to dinner. It was a most agreeable finish to the day, and the *agricultural* "feast of reason and flow of soul," was most edifying! A roast leg of lamb, *French Merino* lamb! formed one of the dishes, and I must confess, prejudiced as I was against tasting any thing with *merino* in it, I found it excellent, and quite free from the *strong* flavor so commonly perceived in this breed. I mention this as a curious fact, and one which at present prices, is not likely to be much investigated in this country. But I think we may rank these sheep as possessing fair mutton properties. The next day was the great Sheep Fair at Rambouillet, an account of which I will leave till my next number. F. M. R. *Morris, Otsego Co., N. Y.*

### Inquiries about Manures.

We often have inquiries whether long or short manure is best; whether straw plowed in is beneficial; whether chip-dirt is hurtful or advantageous, &c. General inquiries cannot always receive a general answer. For instance, we have known long manure, or that which was composed of much straw mixed with strongly fertilizing materials, prove actually injurious on light soils, and in dry seasons. On the contrary, we have known straw alone to prove highly beneficial on heavy and rather wet soils, by increasing the lightness and porosity, and facilitating drainage.

To prevent bad results on light land, all manure, but more especially that which is unfermented and mixed with straw, should be as much pulverized and mingled with the soil as possible. It should be first spread, and allowed to dry a few hours, the loss by evaporation being far less than the loss by want of pulverization. It can then be thoroughly torn to pieces by repeated harrowings, which will mix it thoroughly at the same time with the surface soil. When turned under by the plow, none of it will remain in lumps, and by being well intermixed, it will serve rather to preserve than to dissipate the moisture. The same treatment on heavy soils, will also have a beneficial result, by increasing the friability of the parts. In soils not over-supplied with vegetable matter, straw and chip-dirt become useful as soon as they decay; and in adhesive soils they are useful by lessening the tenacity and promoting drainage. But on light soils, they often prove hurtful, and most so in dry seasons.

# Horticultural Department.

## Strawberries at Rochester.

The exhibition of the Genesee Valley Horticultural Society, the early part of the present summer, furnished much of an interesting character to the strawberry culturist. As a proof of the zeal which actuates some cultivators in testing new sorts, it need only be stated that R. G. Pardee, of Palmyra, presented about forty varieties, as a part of his collection in bearing. Several cultivators exhibited a dozen sorts or more each, most of them possessing high excellence. Ellwanger & Barry offered for examination, besides many others, seven of their new seedling varieties.* Some of these for size and productiveness stand high, and for those who prefer a mild flavor, which characterizes most of their seedlings, will be highly esteemed. Bissel & Hooker presented three new seedlings, which evidently possess much merit, and are well worthy of further trial. One was staminate and two pistillate. For the best sort, every one appeared to be decidedly in favor of *Burr's New Pine*, the two first premiums being awarded to this sort. Some of the committee declared they were satisfied they had at last found the worst flavored strawberry in existence,—the Lizzy Randolph,† a large showy sort from Flushing. These two they felt assured would constitute the head and the tail of any list that could be made out, but the precise intermediate places for other varieties, they could not exactly agree in assigning. They however agreed to recommend the following as worthy of cultivation:—

Besides Burr's New Pine, placed at the head of the list as the best and most valuable, was *Large Early Scarlet*, a valuable early sort, and the best staminate for fertilizing others; *Scarlet Melting*, remarkable for its productiveness and easy growth, but not of high flavor—and from its extreme softness, only fit for home use; *Rival Hudson*, the best late sort, excellent for preserving, and from its productiveness, valuable for market; *Crimson Cone* and *Hovey's Seedling*, whose characters are well known. These the fruit committee were inclined to regard as the best six varieties, taking all points into consideration, for the vicinity of Rochester.

Among other sorts exhibited, the Cushing was noticed as being a large and very showy sort, but not high flavored. One of the fruit committee, who disliked a high acid flavor, regarded it as a valuable fruit. It is, however, not a good bearer. Buist's Prize, although large and showy, was found to be of very moderate quality. Iowa and Cornucopia were poor. Among new sorts which appeared to possess fine flavor, were McAvoy's Superior, Ellwanger & Barry's Unique Scarlet, and Prince's Charlotte. British Queen was of good quality, but it is remarkable that this sort, which in England exceeds in size and productiveness any thing we can raise here, should be so comparatively small and quite unproductive here. Boston Pine would have been recommended as one of the six best sorts, had not several cultivators lost many of their plants of this sort, during last winter. Prince's Profuse Scarlet is a good berry, but not enough better than the Large Early Scarlet to entitle it to distinction, while, being a pistillate, it requires a fertilizer. Very fine specimens of Jenny's Seedling were exhibited, and this variety promises to be a fine and rather a productive sort.

It was observed as a singular circumstance, that nearly all the specimens of Hovey's Seedling, for different localities widely apart, were distinctly and conspicuously coxcombed—a very unusual thing for that variety in other seasons.

* The Monroe Scarlet has excited much notice on some grounds this year—is a good and large berry, and an enormous bearer.

† Justice requires us to say of this fruit, however, that it is of the largest size, exceedingly showy, and a very great bearer.

## Select June Roses.

"Will you name a few of the best *June roses*, taking into view both form and color?" *A. Triomphe d' Abbeville*, a fine deep red, very double, with a small green center; *Bonne Genevieve*, a beautiful clear rose, less double, but of handsome form; *La Tourterelle*, a pale purple or dove color, with delicately imbricated petals *Roi de Prusse* and *London Pride*, light purple, of fine form, and very double, the latter the most so; *General Thiers*, very dark velvet purple, remarkable for the delicacy of its petals; *Victor Tracy*, of only moderate pretensions as to form, but a remarkably large richly colored rose, and an uncommonly vigorous grower; *George the Fourth*, very large, dark rich velvet, its only fault being its loose form; and among white roses, *Madame d'Arblay*, *Blanche Fleur*, *Hybrid Blanche* and *Madame Plantier*—Madame Hardy is a very fine white rose, but too tender for the north. The old *Crimson Boursalt* or Maheka, and the *Boursalt Elegans*, (very often spurious,) are fine for pillars, as are also the Prarie roses, the *Baltimore Belle*, *Queen of the Prairies*, *Perpetual Pink*, &c. We should not forget in this list, the old *Blush Moss*, which in some points has never been equalled by any of the new mosses, and *Princess Adelaide*, perhaps the finest grower of all the moss roses, and very fine in other respects.

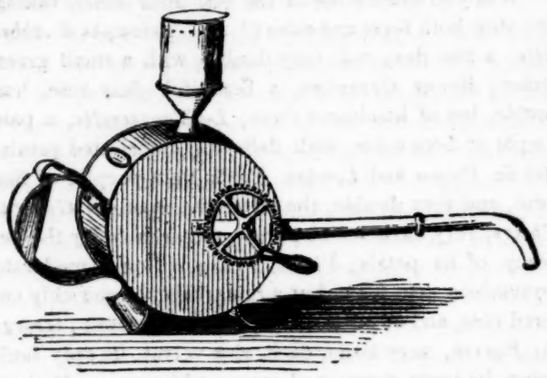
## National Garden.

The *Jardin des Plantes*, or national garden at Paris, costs annually, according to the foreign letters of P. Barry, about $100,000 for its entire support. It contains in a growing state, arranged and labelled, all the best new and old *kitchen vegetables*, where market gardeners may come and learn their qualities; a great collection of *medicinal plants;* a complete assemblage of the *grasses;* an *arboretum* (of ornamental trees;) a beautifully cultivated *fruit garden;* a full green-house and hot-house department; a *menagerie* of everything from all parts of the world, from elephants to monkies; wild and domestic birds; the richest anatomical collection in Europe, comprises over 15,000 preparations; 60,000 specimens of minerals, and fifty thousand species of dried plants; a natural history library of some thirty thousand volumes; besides which there are experiments in all departments of horticulture constantly in progress, and gratuitous lectures delivered by the most eminent scientific men. Now the question natural-

ly suggests itself,—which would be the greatest benefit, to the people of this country, such an institution as this, at $100,000 annually, or a *navy* costing yearly ONE HUNDRED TIMES this amount.

### Brown's Fumigator for Destroying Insects.

An intelligent cultivator of fruit lately remarked, after alluding to the great improvements already made in the selection of fine varieties, "I am satisfied that in future the great campaign is to be with insects—they are increasing with the increase of cultivation." Experience is rapidly teaching us the truth of this remark; and hence every new and successful attempt to destroy them must be welcomed by all cultivators. The following description of a new machine for this purpose, is given in Hovey's Magazine, and operates in throwing out



smoke very much on the same principle as the fanning mill. Delicate plants or shrubs may be covered for fumigation with an instrument resembling an umbrella with a long sharp staff, and from the outer border of which a curtain is suspended all around. This, when spread and stuck into the ground, completely encases the plant, and retains the fumes. We cannot but yet hope that the fumes of tobacco, sulphur, or some other fœtid poison may be made use of to repel the curculio.

The attacks of insects are yearly become so destructive and annoying that every means should be taken to prevent their increase. Latterly, many of those which a few years ago were perfect pests, have become less injurious from the timely discovery of that great agent for destroying insect life—whale oil soap. Without this, our rose gardens would be complete specimens of devastation, so unconquerable is the slug by every foe, except oil soap.

But while soap is so destructive to many insects, and sulphur to others, there are some sorts which neither will harm, or, at least, there are some which are easier destroyed by other means, the principle of which is fumigation with tobacco. The aphis or green fly is invulnerable to sulphur, while a small stream of tobacco smoke will kill them off "in a whiff."

Many persons make objection to the use of whale oil soap, on account of its strong and disagreeable odor. To us, no oder, however bad, is so objectionable as a horde of insects preying on a beautiful plant. But to those who do dislike oil soap, fumigation will at once suggest itself as one of the best means of destroying many of the same insects for which soap is generally made use of. The only trouble has been how to apply the fumes of tobacco to plants and shrubs, especially those growing in the open air; this has always been attended with much trouble, but at last it has been in a great degree obviated by Brown's Patent Fumigator, of which we present an engraving above.

This is a new and improved instrument for effectually applying tobacco smoke to conservatories, greenhouses, frames, &c., and to plants in the open ground; also to dwelling houses, closets, cellars, aviaries, heneries, &c., where insects of various kinds are often very annoying, disagreeable or destructive.

It has been extensively used in England, and has been recommended by Mr. Paxton, Mr. Beck, Dr. Lindley, Mr. Glenny, Mr. Johnston, Mr. Wood, and other editors, gardeners, nurserymen and amateur cultivators. It has also been tried by amateurs and cultivators in the vicinity of Boston, and has been found to be well adapted to the purpose for which it was invented. The *thrips* and the *aphis*, two of the most destructive insects to grapes and roses, are killed immediately upon one good application of smoke. We are confident it will prove a valuable machine, and one which every gardener or amateur should always have at hand. An hour's application of the smoke will save hundreds of plants, trees, &c.

Formerly all the fumigating was done with a kind of bellows, hard to work, and not of sufficient capacity to fill a small house, or to throw out the smoke in such a cool, continuous stream. All the objections to the bellows are obviated in Brown's Fumigator.

The machine, as represented in the engraving, is made of tin, and is sufficiently light and portable to be used with ease. It consists of a circular box, on the top of which is a copper pot, movable, in which the tobacco is placed. The interior of the box is so contrived with fans, as, by turning the handle, to throw out through the tube on the opposite side, a full stream of perfectly cool smoke.

It should be worked as follows:—Fill the copper pot with tobacco, (leaf is the best,) placed in rather lightly; then, with a piece of lighted paper, ignite it: turn the handle immediately, rather fast at first, but very gently after the smoke appears freely at the mouth of the tube; when the tobacco is exhausted, with a damp cloth remove the pot and fill immediately, repeating the operation as long as may be required.

Amateurs, and especially ladies, to whom smoke is extremely disagreeable, can use the Fumigator without suffering any of the disagreeableness, and often nausea, arising from the use of tobacco, as applied in the ordinary way.

For fumigation in the open air, in the most effective way, an old cloth or sheet may be thrown over the bush, and the end of the tube applied at the bottom. The space will be immediately filled, and every insect destroyed.

We can highly recommend this Fumigator as one of the most useful machines to every cultivator. With one of these, no one need complain that their plants have suffered from the green fly.

### Black Knot on Plum Trees.

EDS. CULTIVATOR—The following course of treatment pursued by me with a knot on a plum tree, and by which I believe I have destroyed the disease, is communicated rather as a possible method, than as a certain cure. Last summer I noticed the excrescence, and at once cut off all the bark, to which the disease had extended; shortly afterwards it again made its appearance, farther up the limb, and again I cut it out, disliking very much to cut off the limb, as it constituted about one-sixth of the whole tree. It did not appear again until this spring, when it broke out at the extremities of the previously excised portion of the bark; the upper excrescence I again cut out, and proceeded to puncture the lower one with a sharp penknife point, at the same time cutting across the bark below this excrescence, to separate it from the healthy part of the bark. At several times since I punctured the excrescence, it growing out larger from the tree all the while, until yesterday, when on sticking my knife into it I found it was hollow. I then

dug out the whole, and with it took out two grub-like looking worms, about three-eights of an inch in length, and am inclined to believe from the appearance of the wood under the wart or knot, that I have succeeded in removing the disease and its cause. The wood where the bark had previously been cut off, presents an appearance as if it had been perforated in very many places, and a continuous depression running in its length, as though a channel for the passage of the chief cause of the disease. L. V. W. *Albany, June* 17, 1852.

### Destructive Caterpillars.

Our readers will perhaps remember a notice a year since, of a very destructive caterpillar in Onondaga and Cayuga counties, which defoliated entire orchards, and destroyed the apple crop. The following extract from a letter from Cayuga county, dated 6 mo. 19, 1852, furnishes some additional information. It will be remembered by those acquainted with this caterpillar, that it is distinguished by a row of spots along the center of the back, from the common orchard caterpillar, which has a single whitish line.

"The spotted-back caterpillars are in very diminished numbers this season. Last year people spoke of them *by the million;* and the fences, along which they travelled, were partially covered with them. This year very few appear to be changing their quarters, and the reason may be, there is food enough for all without that necessity. It is said they make a small web very early in the spring, which often escapes observation; and therefore I should think they must suffer much during late vernal frosts, and cold rains. Perhaps this is the reason why they are so scarce in some seasons, and abundant in others, while the common caterpillar remains much the same in regard to numbers. In 1834, however, when several inches of snow fell about the middle of the fifth month, [May,] very few of this troublesome insect survived; but in ordinary seasons, their web appears sufficient to protect them. I should like to hear the remarks of others in regard to the extent of country through which the *spotted-backs* ranged, and also in regard to their duration. Some have called them the *army worm*; but whether they are the same that occasionlly ravages the western states, I have no means of ascertaining."

### Varieties from a Single Species.

Striking instances of the vast number of varieties which may be produced from a single species, are furnished by the apple and pear, the former more particularly in its countless thousands, with all grades, from honied sweetness to sharp austerily, from nearly black in color to white; from the huge monstrous pippin to the little lady apple—and with almost endless degrees in texture, juiciness, astringency, form of tree and form of fruit, &c. But for the most wild and *unlike* variations in appearance, perhaps no plant furnishes anything equal to the *Brassica oleracea*, which, in its uncultivated state, is a little plant growing on the maratime cliffs of England, with smooth leaves, and a spindle shaped root. The varieties which this plant has produced by cultivation are well known to scientific gardeners, but it may be interesting to give the following *general* list, condensed from Kemp's recently published treatise on Agricultural Physiology:—

1. All borecoles or kails, at least a dozen sorts.
2. All cabbages. [White, Savoy, red, &c., with numerous sub-varieties.]
3. Brussel sprouts.
4. All cauliflowers and Broccolies. [Forming close heads of flower buds.]
5. The Rape plant.
6. The Sweedish turnep, with its vast number of sub-varieties.
7. The Kohl-rabi.

By descending to more minuteness, this list might be made to fill whole pages. To suppose a winter drumhead, and a ruta baga of equal size, originally sprang from the same little wild plant, would require a severe stretch of credulity, were not the fact most conclusively demonstrated. To the scientific observer, however, this apparantly wide distinction, does not appear nearly so great as the difference between those seemingly more similar plants, rye and barley. A head of bearded wheat and a head of rye may appear more nearly related than bearded and bald wheat; while the botanist sees in the former a wide generic separation, and in the latter but an accidental variation.

### Horticultural Hints.

To preserve plum trees from black knots or excrescences, cut them off several times a year, *cut* and *keep cutting*.

To prevent the cherry crop from being spoiled by the curculio, *keep the ground from grass.*

The only remedy for the cherry bird, is shooting—hundreds have thus been driven away by a few hours labor, *so that one was not seen for a week.*

The best remedy for bugs on melons and squashes, is a cheap square box covered with guaze or netting.

To transplant evergreens, one point attended to will result in success—neglected, in failure—this is, *removing plenty of earth with the roots.*

Mulching and watering the raspberry on light soils will usually double the size of the fruit.

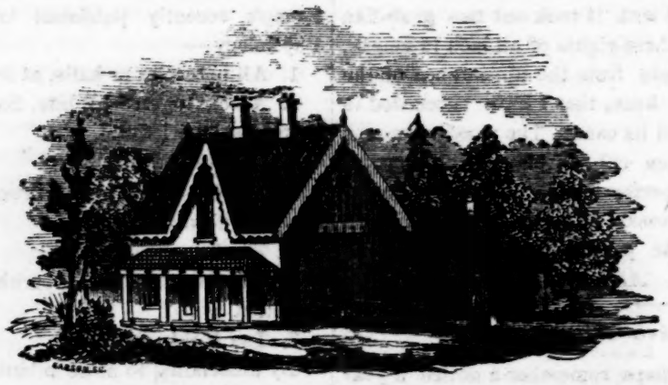
Banking round young trees a foot high in autumn, is an infallible remedy against mice.

Mulching young fruit trees is one of the best operations for this country, but the litter must be removed early in autumn, or the mice will play havoc.

Rapid Growth of Apple Trees.—The Massachusetts Ploughman gives the measurement of four apple trees set five years ago, when three years from the bud. The soil was of quite moderate fertility. Their present circumference one foot from the ground, is fifteen inches each. This rapid growth is owing to careful transplanting, mulching with strawy manure and peat, washing the stems with potash ley, and keeping the ground in good tillage.

Culture of the Dandelion.—We are informed in the Prairie Farmer, that a man who supplies the Boston market with this early vegetable, obtains annually from one-fourth of an acre, the sum of $200.

Wash for Barns.—The *Horticulturist* gives the following as the best for this purpose. Hydraulic cement, 1 peck; freshly slacked lime, 1 peck; yellow ochre (in powder) 4 lbs.; burnt umber, 4 lbs.; the whole to be "dissolved" in hot water, and applied with a brush.

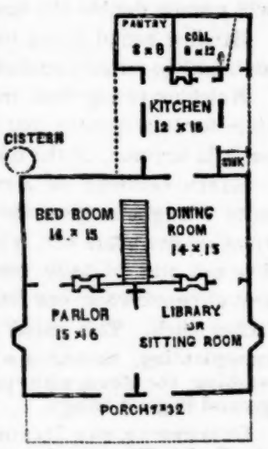


## Plan of a House.

[No two men, scarcely, will build dwellings exactly alike in all particulars, and the diversity of plans which we are enabled occasionally to present our readers, cannot fail to suggest useful hints to some. The following possesses some decided excellencies; but we are sorry our correspondent found it necessary to find fault with another plan, to sustain what we cannot but regard some defective points of his own. Why cannot we have *every* desirable quality—brick filling—and double doors? Let the central portion of the veranda in the following plan, be converted into an entry, or vestibule, and a most objectionable feature is at once removed. We doubt not our correspondent will pardon the freedom of these hints.* Eds.]

Eds. Cultivator—I was highly pleased with J.'s remarks respecting country buildings, and also with his plan, yet I think that in order to render a house "warm and comfortable" in this climate, a good fire-place is more essential than a double coat of plastering, or a warm covering or filling in with brick. Now, if I understand his plan, there are no means of heating any of the bed-rooms, nor the library or sitting-room; this, by many, would be considered a very serious objection, worse even than having doors opening immediately into the rooms from the outside.

Enclosed is the plan of a country house, lately drawn for a friend who is about to build, and who wants a house with four rooms and a kitchen on the first floor, and one story high.




First Floor.

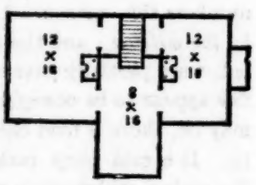
A house built on this plan, would be both comfortable and convenient, and at the same time, as ornamental as a farmer who did not wish to be thought "freakish," would like to build in western Pennsylvania, where you will frequently see *fire walls*, or perhaps a roof extending over the gable just far enough to cover a three-quarter inch "barge board," high grecian porticos, and chimneys invariably in the outside walls.

* We have taken the liberty to give a perspective view, instead of the two elevations of our correspondent.

The main building will be 32 by 34 feet; the kitchen 12 by 16, with two porches 4 feet wide—the pantry and coal-house connected with the kitchen, will be 8 by 20 feet. There is a door opening out of the kitchen into the pantry, and from the porch into the coal-house.

The building will front the south-east, and from the bay window in the sitting-room, will be visible three-fourths of the farm; from the parlor bay will be seen part of the orchard and the shrubbery.

Each room is provided with one closet or wardrobe; the library with a permanent book-case. All the windows in the second story open on hinges; the one to the north-east into a small balcony with light iron railing, 4 by 6 feet, which is sheltered by the roof, projecting over the wall two feet. The window at the opposite end has a railing attached to the outer edge of the wall, three feet high. The lower story, besides the dining-room, library, and parlor, contains one large bed-room. The second has two good bed-rooms, 12 by 16 feet, and if necessary, a bed could be placed in the middle room, which is 8 by 16 feet, extending to the front wall. The stories are each 10 feet high. The stairs ascend between the chamber and dining-room; the cellar stairs are under them. Every room except the middle one in the second story, is provided with a fire-place. The roof is steep, the apex being 16 feet from the second floor; this leaves room for a high ceiling in the upper bed-rooms, and for a small ventilating window at each end, above the ceiling, which permits a free circulation of air between the plastering and roof.




Second Floor.

If you, or any of the readers of the Cultivator, can suggest any improvements on the above plan, before the building is commenced this summer, I will be glad to receive them. A. D. C. *Temperanceville, March*, 1852.

Bruising Apples.—The Working Farmer says, in speaking of the great success of R. L. Pell, and the high prices he gets in foreign markets, "Mr. Pell has occasionally made a thumb-dent in an apple, and after tying a label to the stem, placed the apple so dented in the center of a barrel of sound apples, requesting his agent in England to report the result. The report has always been, that more than half of such apples have been found decayed." How absurd, then, to club or shake apples from a tree, or even to tumble them by basketfuls, when hand-picked, into barrels.

Silesian Merino Sheep.

EDS. CULTIVATOR—I send you a cut of a group of Silesian Merino Ewes, which represents them exactly in the same position that they were taken from a daguerreotype view, as they were standing in an open yard; consequently they do not show all of their good points—still enough are seen to enable one to judge of the character of the sheep. WM. R. SANFORD, Esq., of Orwell, Vt., with whom I traveled through France, Spain, and the German states, for the purpose of procuring Merino sheep, gave a cut of one from this flock, which was published in the July number of the Cultivator, 1851.

The original stock of these sheep were from Spain in 1811, and since that time have been the property of a Silesian gentleman, who possessed all the necessary qualifications for a successful sheep breeder. They are about medium size, well formed, and have every appearance of being a hardy animal, often attaining a great age, one of which lived to be 21 years old.

The superiority of these sheep over other Merinos, is in the fleece, which, as to quality, will compare well with many Saxon flocks. It is very thick, remarkably so on the belly and legs, and as to evenness of fleece they have no rivals.

The length of staple is somewhat shorter than many other Merinos, and yet they yield a heavy fleece. Their wool is crimpy, and has a sufficient quantity of clear white oil to form a dark surface, which is beneficial to the wool, and partly protects them from storms. These sheep, I feel confident, will prove very acceptable to those farmers who wish to grow a fine grade of wool and a heavy fleece.

It is supposed by a large portion of wool growers of the country, that in proportion as the wool grows finer, the fleece becomes lighter. But I have long been of a different opinion, and my experience for the last few years has led me to believe that, as much at least of fine wool can be grown from the same amount of keeping as that of the coarser grades. I have no hesitancy in saying that one hundred or one thousand pounds of *fine Merino* wool can be produced at a less cost than an equal amount of any inferior quality.

These sheep cross well with the common Merinos of the country. In several instances, where I let the use of bucks, in flocks that are smooth skinned, the lambs from the Silesian rams were wrinkled from their ears to the end of their tails, and will no doubt add much to the quantity as well as to the quality of the wool.

Last year our Silesian ewes sheared an average of 7 lbs. 10 oz. in the dirt, of only 10 months growth. This year, in order to more thoroughly test their true value, I have been induced to wash them. They were first well soaked, then after standing in the sun an hour or more, were taken into the water, under a spout having a good fall, and washed until the dark ends disappeared, and the water run from the wool looking perfectly clear. After suckling lambs from January to May, which would lessen the fleece from one to two pounds each, and cleansing in the above manner, they gave an average of 4 lbs. 5¼ oz. per head.

Our bucks of this variety, sheared last year from 7¼ to 10¼ lbs. per head. This year they have not been shorn.

I hope that other wool growers will express their views on the subject, through the columns of the Cultivator. If fine wool can be produced at the same cost as that of a coarse quality, I am sure that every one would prefer to grow it. GEO. CAMPBELL. *West Westminster, Vt., July* 5, 1852.

CORN AND WEEDS.—A correspondent of the Michigan Farmer allowed the weeds to have as good a chance at his manure and rich land, as his corn, consequently he had only 40 bushels of *ears* to the acre. Next year he plowed well, and kept the weeds down by diligent cultivation, and had 53 bushels of *shelled corn* from his yellow eight-rowed, and 70 bushels from his dent corn, per acre.

### Norman Horses.

Eds. Cultivator—I was much gratified with a communication in your April number, over the signature "F. M. R.," giving some notes of a tour made in France last summer. The portion which particularly attracted my attention, was his notice of the "Percheron" breed of Norman horses, corresponding, as it does, in every particular, with the communications which I have made on the same subject in your valuable Journal, and several other agricultural papers. The identity of the conclusions he arrives at, with my own, in regard to the value of this animal to cross upon our lighter races, is more gratifying from the fact that he does not appear to be aware that this breed of horses has been introduced into our country. That Mr. R. has not seen my articles, I am well satisfied, or he would have made some allusion to my importations. Any man having a knowledge of the good points and qualities of a horse, and enjoying the opportunity of *cross-country* travelling in Normandy, (the only way these horses can be seen to perfection) *must* inevitably arrive at the same conclusions. I have seen in Normandy, similar performances to that of the grey he alludes to, as having carried him, with an another person 14 miles within the hour, before a heavy cabriolet—this vehicle, I think I am safe in saying, is full as heavy as our ordinary four-wheeled Jersey wagons for two horses; it only confirms what I have constantly advanced, that these horses will break down any other breed, more especially the thorough-bred, *in rapid travelling before heavy loads*, and that to an extent to which no one can be aware who has not repeatedly seen their performances. His idea in regard to the cross of the Morgan horse, is undoubtedly correct, and I am only astonished that the breeders of Morgan horses appear to regard this assumption as a stain upon the escutchion of their favorite breed, whereas I do not hesitate to assert that it is *the point* which gives all its value to the breed. That a similar breed, of larger size and superior qualities, will some day spring from the importation of the Percheron, I have not the slightest doubt. "Diligence," now 16 years old, is still as lively as a colt, and in successful practice at his favorite stand in Pennsylvania; he has long since paid all the expenses of the cost and importation of himself and six others, besides having my farm constantly worked by themselves and their progeny, since 1839. Yours very sincerely. Edward Harris. *Moorestown, N. J., June* 17, 1852.

### Retention of Manure by the Soil.

It is not an uncommon opinion that under-drains convey off the enriching and soluble portions of manures, dissolved and carried down by rains. On this subject, Prof. Mapes makes the following remarks, which as applicable to all ordinary cases, are strictly just:—"To suppose that manures in a state of solution will be washed from the mouths of under-drains, is an error—for it is impossible to filter downward in the fluid form, through any fertile soil. Even the brown liquor of the barn-yard will have all its available constituents abstracted by the soil, before it descends into the earth thirty-four inches. If this were not true, our wells would have long since become useless, the earth's surface would have become barren, and the raw materials of which plants are made, which now occupy the earth's surface and surrounding atmosphere, would have passed towards the earth's center; but the carbon and alumina of the soil, each of which has the power of absorbing and retaining the necessary food of plants, are agents for carrying into effect the laws of nature for the protection of vegetable growth."

The power of the soil to absorb manure, of which ammonia may be regarded as a chief constituent, is of course limited—but it doubtless exceeds all ordinary cases in practice. Prof. Way found that by filtering a portion of putrid drainage water through a few inches of soil, it had lost all bad odor, and contained no longer any ammonia; but he also found that by filtering fresh liquids of this sort, which had not yet begun to putrify, through such a layer of soil, they even lost all tendency to putrify." His experiments also prove that the soil has a power of absorbing potash, soda, magnesia, and phosphoric acid, as well as ammonia—and these with lime form the chief elements of manure.

The quantity of muriate of ammonia, absorbed by the soil was found to be about one grain in one hundred and fifty—the ammonia constituting less than one-third of this salt. If therefore, the average quantity of ammonia in yard manure is one two-hundredth part, then the amount of manure which may be applied to land, if plowed nine inches deep and thoroughly intermixed, before the soil is saturated with ammonia, is no less than two-fifths of the whole bulk of the soil, or about five hundred loads per acre. The same fact will also show that to prevent completely any danger of loss from compost heaps, the amount of soil, or similar absorbent, should be more than twice that of the yard manure used in mixture. As the absorbing power is chiefly owing to the clay it contains, it will be understood that heavy soils will retain more manure, when very copiously applied, than those of a lighter character.

The theory of the value of gypsum depending on its absorption of ammonia from dew and rain, retains but a slender hold on probability, when it is remembered that four pounds of rain water never contain more than one grain of ammonia—and that all the ammonia that falls in our heaviest storms would be absorbed by a layer or film of soil ten times thinner than the finest bank-note paper.

### The Horse-Racket.

Every boy knows, perhaps, what a snow-shoe is—that is, one with very broad soles of wood, to enable him to walk without breaking through, on a slightly crusted snow. A similar contrivance to enable horses to travel upon bog-meadows, in plowing, harrowing, carting, sledding, &c., may be new to most of our readers. Its construction is thus described by Wm. H. Howard, in the Granite Farmer. "They are nine inches long and eight wide, with a hole in the center the size of the bottom of the horse's foot, with a bar of iron across the bottom of the hole, about three-fourths of an inch wide and the fourth of an inch thick, on which his foot rests; also four leather loops, equi-distant, through which to pass a strap, and buckle around the fetlock joint." These, we are informed, admit the horse to tread safely where the mud is deep.

**Mr. Campbell's French Merino Sheep.**

(See Cultivator for July, page 251.)

## Sheep and Wool in the United States.

The superintendent of the census has furnished the National Intelligencer with the following tabular view of the number of sheep in each State and Territory in 1850, as returned by the census taken in that year, and also the number of pounds of wool clipped in each State and Territory, according to the same returns. To this we have added a column showing the amount of wool per head, in pounds, ounces and hundredths of ounces in each state:

| *States.* | *Sheep.* | *Lbs. of wool.* | *Wool to each Sheep.* lbs. oz. |
|---|---|---|---|
| Maine,..... | 440,943 | 1,362,986 | 3 1.48 |
| New-Hampshire,.... | 384,757 | 1,108,476 | 2 14.80 |
| Vermont,..... | 919,992 | 3,410,993 | 3 11.32 |
| Massachusetts,..... | 188,651 | 585,136 | 3 1.60 |
| Rhode-Island,..... | 44,296 | 120,692 | 2 11.20 |
| Connecticut,..... | 174,181 | 497,451 | 2 13.76 |
| New-York,..... ... | 3,454,241 | 10,070,301 | 2 14.56 |
| New Jersey,..... .. | 160,488 | 375,396 | 2 5.40 |
| Pennsylvania,..... | 1,822,257 | 4,481,570 | 2 7.34 |
| Delaware,..... | 27,503 | 57,768 | 2 1.60 |
| Maryland..... | 177,902 | 480,229 | 2 10.04 |
| Dist. of Col.,..... | 150 | 525 | 3 8.00 |
| Virginia,..... | 1,311,004 | 2,860,765 | 2 3.08 |
| N. Carolina,..... | 595,249 | 970,738 | 1 10.08 |
| S. Carolina,..... | 281,754 | 467,223 | 1 11.20 |
| Georgia,..... | 560,435 | 990,019 | 1 9.28 |
| Florida,..... | 23,311 | 23,247 | - 15.95 |
| Alabama,..... ..... | 371,800 | 657,118 | 1 12.16 |
| Mississippi,..... | 304,929 | 559,619 | 1 13.28 |
| Louisiana,..... | 110,333 | 109,897 | - 15.94 |
| Texas,..... | 99,098 | 131,384 | 1 5.12 |
| Arkansas,..... | 91,256 | 182,595 | 2 0.01 |
| Tennessee,..... | 811,587 | 1,361,378 | 1 10.72 |
| Kentucky, . ..... | 1,070,303 | 2,283,685 | 2 2.16 |
| Ohio,..... | 3,937,096 | 10,111,288 | 2 8.96 |
| Michigan,..... | 746,435 | 2,043,283 | 2 11.68 |
| Indiana,..... | 1,122,493 | 2,610,287 | 2 3.60 |
| Illinois,..... | 894,043 | 2,150,113 | 2 6.48 |
| Missouri,..... | 756,399 | 1,615,898 | 2 2.16 |
| Iowa,..... | 149,960 | 373,898 | 2 7.84 |
| Wisconsin,..... | 124,892 | 263,903 | 2 1.92 |
| California,..... | 17,574 | 5,420 | - 5.02 |
| Minnesota Ter.,..... | 80 | 95 | 1 3.00 |
| Oregon do ..... | 15,382 | 29,686 | 1 14.88 |
| Utah do ..... | 3,262 | 8,222 | 2 8.32 |
| New Mexico,..... | 377,271 | 32,901 | - 1.47 |
| Total,..... | 21,571,306 | 52,417,287 | Average,...2 6.86 |

## Ten Reasons for Under-draining.

1. It prevents water which falls from resting on or near the surface, and renders the soil dry enough to be worked or plowed at all times.

2. By rendering the soil porous or spongy, it takes in water without flooding in time of rain, and gives it off again gradually in time of drouth.

3. By preventing adhesion and assisting pulverization, it allows the roots to pass freely through all parts of the soil.

4. By facilitating the mixture of manure through the pulverized portions, it greatly increases its value and effect.

5. It allows water falling on the surface to pass downward, carrying with it any fertilizing substances, (as carbonic acid and ammonia,) until they are arrested by the absorption of the soil.

6. It abstracts in a similar manner the heat contained in falling rains, thus warming the soil, the water discharged by drain-mouths being many degrees colder than ordinary rains.

7. The increased porosity of the soil renders it a more perfect non-conductor of heat, and the roots of plants are less injured by freezing in winter.

8. The same cause admits the entrance of air, facilitating the decomposition of enriching portions of the soil.

9. By admitting early plowing, crops may be sown early, and an increased amount reaped in consequence.

10. It economizes labor, by allowing the work to go on at all times, without interruption from surplus water in spring, or from a hard baked soil in summer.

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Oil Cake.—Experiments prove that *weight for weight*, the cake which is left after the oil is pressed out of the linseed, is more fatting than the linseed itself.

## United States Ag. Society.

The National Ag. Convention, the call for which was noticed in our last no., met at the Smithsonian Institution, Washington city, on the 24th June.

There were present at the organization 151 delegates, viz: From New-Hampshire, 8; Vermont, 3; Massachusetts, 25; Rhode Island, 3; Connecticut, 4; New-York, 20; New-Jersey, 2; Pennsylvania, 5; Delaware, 6; Maland, 23; Virginia, 10; North Carolina, 1; Louisiana, 2; Ohio, 12; Kentucky, 2; Tennessee, 3; Indiana, 1; Illinois, 2; Arkansas, 1; Michigan, 4; Texas, 1; Wisconsin, 2; District of Columbia, 11.

Judge Frederick Watts, of Pennsylvania, was appointed temporary chairman, and the Convention was permanently organized by the choice of the following officers:

PRESIDENT—Marshall P. Wilder, of Massachusetts.

VICE-PRESIDENTS—Henry Wager, of New-York; Frederick Watts, of Penn.; Wm. F. Hunter, Ohio; Chas. B. Calvert, of Md.; Geo. W. Nesmith, of N. H.; Jno. A. Throckmorton, of Va.; H. K. Burgwyn, of N. C.; T. J. Rusk, of Texas; J. D. Doty, of Wisconsin.

SECRETARIES—B. P. Johnson, New-York; William S. King, of R. I.; J. B. De Bow, La.; J. A. Warder, Ohio.

A business committee, consisting of one from each State and Territory, was appointed, who subsequently reported a constitution for a National Association, which, after discussion and amendment, was adopted, as follows:

### CONSTITUTION.

Sec. 1—The name of this association shall be "The United States Agricultural Society."

### MEMBERS—DUES.

Sec. 2—The society shall consist of all such persons as shall signify to any officer of the society a wish to become a member, and who shall pay two dollars to the treasurer of the society, and a like sum annually hereafter, of delegates from the State agricultural societies in the States and Territories and District of Columbia, who may be appointed to attend the annual and other meetings of the society, and who shall pay the like sum, and also of such honorary members as the society may see fit to elect. Each member shall be entitled to receive a journal or publication of said society, containing an account of its proceedings and such additional matter as shall be deemed worthy of publication, free from any expense except postage. Twenty-five dollars shall entitle any one to the privileges of life membership and exempt him from any annual taxation.

### OFFICERS.

Sec. 3—The officers of this society shall be a President, a Vice-President from each State and Territory in the Union, and from the District of Columbia, a Treasurer, a Corresponding Secretary, a Recording Secretary, and a Board of Agriculture, to consist of three members from each State, Territory, and the district of Columbia, to be appointed by the Executive Committee of the societies of such States, Territories, &c., and where there be no such State societies, to be appointed by the Executive Committee of this society. The President of the society shall be, *ex officio*, a member and President of this board and of the Executive Committee.

### DUTIES OF OFFICERS.

The President shall have a general superintendence of all the affairs of the society. In case of his death or inability to discharge the functions of this office, the Board of Agriculture shall select a Vice-President to act in his stead, and clothed with the same power, and shall perform the same duties as the President until the next annual election.

*Vice-Presidents*—It shall be their duty to advance all the objects of the association, in their several districts; to explain to agriculturists the character and objects of this association, and endeavor to obtain their co-operation and support; to watch the advance of practical agriculture, and to make known the results of the same, by report or otherwise, from year to year.

*Board of Agriculture*—It shall be the duty of this Board to watch the interests of agriculture, as they are or may be affected by the legislation of the country, and to make such reports, memorials and recommendations as may advance the cause of agriculture, and to promote and diffuse agricultural knowledge; to examine, and when necessary, report upon the practicability of establishing agricultural schools, colleges, and model farms; to set forth the advantages of agricultural and geological surveys, and to show the importance of the application of science to agriculture; to represent through their reports the relation of our agriculture to that of foreign countries, and to endeavor to obtain information from such countries; to point out the advantage of introducing any new staples, seeds, and plants; to obtain, so far as practicable, annual statistical returns of the condition of agriculture throughout the different States—all which information shall be published by said society, and form part of its transactions.

*The Executive Committee* shall transact the general business of the society; it shall consist of five persons, who shall designate the time and place for exhibitions, regulate the expenditures, and take such supervisory charge of the business of the society as may best promote its interests. This body shall elect its own chairman. Three members shall constitute a quorum.

*Treasurer*—The Treasurer shall keep an account of all moneys, and shall pay bills only after they have been audited by the Corresponding and Recording Secretaries, and a member of the Executive Committee, and countersigned by the President of the Society or the Chairman of the Executive Committee.

*Cor. Secretary*—The duty of this officer shall be to correspond with persons interested in agriculture; at each stated meeting he shall read such portions of his correspondence as may be of general interest; and it shall be his duty to carry out and advocate the views of the Board of Agriculture in obtaining, arranging, and publishing any information they may desire to have laid before the agricultural community.

*The Rec. Secretary* shall keep a record of the minutes of the society, and of its Executive Committee.

Sec. 4.—The annual meetings of the society shall be held at the city of Washington, on the first Wednesday of February, in each year, when all the officers of the society for the ensuing year shall be elected by ballot. The Executive Committee shall be competent, with the approbation of the society, to appoint occasional meetings, to be held at other points. Fifteen members shall constitute a quorum for business.

Sec. 5.—This constitution may be altered at any annual meeting, by a vote of two-thirds of the members in attendance, provided not less than fifty be present.

The following officers were then elected:—

PRESIDENT—Marshall P. Wilder, of Massachusetts.

VICE-PRESIDENTS—Ezekiel Holmes, Maine; George W. Nesmith, New-Hampshire; Henry Stevens, Barnet, Vt.; B. V. French, Mass; Josiah Chapin, R. I.; S. D. Hubbard, Conn.; Henry Wager, N. Y.; Thomas Hancock, N. J.; Frederick Watts, Penn.; Peter W. Causey, Del.; W. D. Bowie, Md.; George W. P. Custis, Va.; H. K. Burgwyn, N. C.; John Witherspoon, S. C.; Thomas Stocks, Ga.; R. Jones, Ala.; Alex. H. Bequees, Miss.; A. B. Roman, La.; F. Kinsman, Ohio; R. Mallory, Kentucky; Dr. John Shelby, Tennessee; John L. Robinson, Ia.; S. A. Douglass, Ill.; David R. Atchinson, Missouri: T. B. Flurnoy, Ark.; James L. Cougar, Mich.; Dr. Simmons Baker, Florida; T. A. Rusk, Texas; W. F. Coolbaugh, Iowa; James D. Doty, Wis.; Kilburn W. Boggs, Cal.; J. F. Callan, Dist. of Columbia; S. M. Baird, New-Mexico; Alex. Ramsay, Minnesota; Joseph Lane, Oregon; Joseph L. Hayes, Utah.

EXECUTIVE COMMITTEE—C. B. Calvert, Md.; J. A. King, N. Y.; Dr. A. L. Elwyn, Pa.; W. B. Newton, Va.; J. D. Weston, Wis.

CORRESPONDING SECRETARY—Daniel Lee.

RECORDING SECRETARY—Robert C. Walker.

TREASURER—William Selden.

The business committee reported a resolution asking of Congress the establishment of a Bureau of Agriculture, which was discussed at great length by Messrs. Gentry, of Tenn; Douglass, of Illinois; Henry, of Washington; Holcomb, of Delaware, and others—some of the speakers preferring that the subject of Agriculture should be made a branch of the Smithsonian Institution, instead of an independent department of government. The resolution was finally so modified as to ask Congress to do what in its wisdom it should deem most expedient for the interests of Agriculture, and thus modified, was adopted.

Previous to adjournment, after a three days session, the delegates in a body, visited the President of the U. States. The President was addressed on the part of the delegates, by Col. Wilder, to which he made a brief and pertinent reply.

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APPLICATION OF GUANO.—C. M. Hovey, a skilful cultivator at Boston, who "finds a vast difference in favor of this manure over stable dung, costing twice the amount of the guano," has found much to depend on the season of its application. Most of the failures in our comparatively dry and hot climate, are the result of applying too late. He spreads it on the ground very early in the spring, so as to become thoroughly dissolved by the rains. A wet time should be chosen, and the surface of the earth disturbed, [by raking or harrowing,] so as to bury and mix it.

### Exhibition of the Vermont State Ag. Society.

The annual exhibition of the Vermont State Agricultural Society, will be held at Rutland on the 1st, 2d, and 3d days of September, 1852.

An area of forty acres, of convenient access, near the village of Rutland, will be enclosed for the exhibition—embracing a pleasant grove, fresh running water, intervale and rolling sward land, and suitable structures for the accommodation of all, without charge, who wish to participate in the exhibition.

Persons honoring the Society with their presence on the occasion, will have opportunity for inspecting choice cattle of the various improved breeds; Suffolk and other valuable breeds of swine; large numbers, and unrivalled representatives of French Merino, German Merino, Spanish Merino, and Saxony sheep—and Vermont horses, in all their variety and excellence. For the purpose of showing the general action and carriage, and the speed of horses, a well graded trotting course, within the enclosure, will be prepared, and stated occasions will be designated for trials of action and speed.

A Mechanic's and Manufacturers' Hall, of ample dimensions, will be erected, in which all productions in those branches of industry may be advantageously shown. It is designed to give prominence to this part of the exhibition.

Works of art and of taste, household manufactures, and the like, will have a suitable place for display.

The Society will be addressed by William S. King, Esq., on the afternoon of the first day—by Hon. William H. Seward, on the afternoon of the second day, and by other gentlemen, at various times during the exhibition.

Arrangements have been made with all the railroads of the state, with the Saratoga & Washington, the Troy & Boston, and Ogdensburgh Railroad, and the Champlain Steamboat Company, by which passengers will be carried to and from the exhibition at one-half the usual price—and animals and articles free, at the risk of owners.

Extensive arrangements will be made at Rutland for the accommodation of visitors; and those who may fail to procure lodgings there, will be readily accommodated at the numerous stations on the lines of railroad centering at Rutland.

Gentlemen from the States and from the Canadas, are cordially invited to participate in the exhibition.

Communications may be addressed to J. A. Beckwith, Corresponing Secretary of the Vt. State Ag. Soc., Middlebury, Vt. Frederick Holbrook, Prest.

J. A. Beckwith, Sec'y.

### The Turnep Taste in Butter.

The Gardener's Chronicle furnishes an excellent article on the causes which effect the quality of milk and butter, and suggests chemical inquiry for ascertaining several unknown points. The "turnep taste" is suspected to arise from the cream being raised in an impure atmosphere, at too low a temperature, and is consequently a peculiar acidity of milk not yet satisfactorily investigated by chemistry. The facts adduced in proof are, that milk has the *turnep taste* whether cows get turneps, ruta-bagas, mangold wurzel, carrots, potatoes, or furze; and cases are related where dairy houses, subjected to foul air, rendered butter unfit for eating, although under the care of good dairy maids, in one of which all bad taste was removed at the first churning, by placing the milk in a clean room in the house, after the removal of the carpet, and in the other by draining the ponds which caused the bad air. Close stables and foul gas from the breath of cows and other causes, are supposed to contribute largely to a bad flavor.

We have fed ruta-bagas largely to milch cows, without producing a turnep taste, by means of the following precautions:—1. Good airy ventilation to building and yards. 2. Feeding after milking, (and it is said to be still better if directly after ruminating, but this we have not tried.) 3. Thorough cleanliness of vessels and dairy building. 4. Working out every particle of buttermilk as early as practicable, as it is in this that the objectionable flavor chiefly resides.

We cannot give full weight to the reasoning of the writer in the Gardener's Chronicle, although the causes therein specified, contribute very largely to the unfavorable result; to test this point further, let cows be fed with turneps at various times in autumn, while running at large in open pastures, and let the experiment be variously performed with and without the precautions named in the last paragraph above, and we have no doubt something important may be learned or established.

### Heavy Crop of Ruta Bagas.

John T. Andrews, of West Cornwall, Ct., furnishes the Genesee Farmer an account of his ruta baga crop, yielding at the rate of 1660 bushels, or 41¼ tons per acre, and remarks that for much of the little he knows of farming, he is indebted to the Albany Cultivator, Genesee Farmer, and Working Farmer. His ruta baga land was a heavy soil, originally yielding but half a ton of hay per acre. Twenty loads of manure were applied per acre, but the resulting potato crop was a failure. The next year it was plowed and manured in a different style, as follows:—First, 12 inches deep, with 20 loads of manure; then, after a few weeks, 40 loads of manure and seven inches deep. It was then harrowed and plowed, and harrowed and plowed, till the manure was thoroughly mixed with the soil. Furrows, twenty-seven inches apart, were then strewed with a mixture of hen-manure, night-soil, ashes and gypsum. The furrows were then reversed, leaving ridges over this last manure. The crop was sown the 20th June—the weeds destroyed as soon as up—and the roots harvested 6th November. The leaves covered the whole ground when fully grown.

This may seem like a large application of manure, but a little calculation will show that 80 loads per acre, worked in a foot deep, form only an eighteenth part of the soil, and every load doubtless produced its full effect, and was not lost. Triple this amount of manure is often applied and worked into garden borders and beds, for raising melons, and vegetables, and a high degree of success usually follows such copious manuring.

There is no doubt that the large crop of roots was very much indebted to the thorough admixture of the manure and soil by means of the repeated plowings and harrowings; an operation even more indispensable on a

heavy soil such as the one above named, than on one of a more friable texture, yet absolutely requisite to both. It is the neglect of this all-important part of good cultivation that has induced many to place the limit of profitable manuring much lower than the best practice would warrant.

### Indefinite Statements.

Half the value of agricultural papers is lost for want of accuracy in writers. An interesting statement of the use of spent tan-bark lately appeared in one of our best agricultural periodicals, in which we are informed, that a tanner made "a pile" of this material, mixed with "his refuse hair, horns, pieces of skin," &c., and by the addition of "a few dollars worth" of "some chemical substance" to induce fermentation, the whole was reduced to good manure. It was applied to five acres of sandy soil, so sterile "as hardly to produce a blade of grass," and in two years the field yielded, with ordinary cultivation, $250 worth of root crops.

Whether "the pile" contained a barrow load or a ship load—whether "his" refuse hair, &c., was ten pounds or ten tons, the accumulation of one week or of one year—we are not informed; neither can we know what material is meant by "some chemical substance," whether assafætida, alcohol, sal ammonia, corrosive sublimate, or something else. Nor can we judge by any degree of shrewdness, whether the price was such that the "few dollars" would give us a pound or a ton.

Now, it requires about two hundred and fifty ordinary blades of grass to weigh an ounce; and supposing by a liberal allowance that "scarcely a blade" means ten blades, or the twenty-fifth part of an ounce, it was certainly a great achievement to increase this to two hundred and fifty dollars worth. But unfortunately we have ho data for determining whether this was not wholly accomplished by the "horns, hair, and skin," which might have amounted to 30 tons, or largely by the assistance of the "chemical substance," which might have been three tons of lime, or three tons of sulphate of lime, or a few pounds of some more costly and powerful substance.

We advert to this subject merely to show the little value of statements whose basis is not accurate weighing or measuring.

### Connecticut State Ag. Society.

We see by the papers that a State Ag. Society was organized at New Haven on the 22d of June. The following is the list of officers chosen, viz:

Sam'l D. Hubbard, of Middletown, *President.*
C. H. Pond, Prest. N. Haven Co. Ag. Society.
Norman Porter, " Hartford Co. "
W. Alexander, " Windham Co. "
P. T. Barnum, " Fairfield Co. "
D.C. Whittlesey " Litchfield Co. "
Chas. B. Phelps " Grsenwoods "
Chas. Hubbard, " Middlesex Co. " *Vice-Presidents*
*Cor. Secretary*—Henry A. Dyer, of Brooklyn.
*Rec. Secretary*—Charles W. Elliott of New Haven.
*Treasurer*—Geo. Brinley, jr., Hartford.
*Directors*—James T. Pratt, Hartford county, Chas. Robinson, New Haven co., Asa Hubbard, Middlesex co., James M. Curtiss, Tolland co., T. S. Gold, Litchfield co., Chas. B. Ayer, N. London co., Thomas A. Mead, Fairfield co., George A. Payne, Windham co.

Winter Barley.—A writer in the Genesee Farmer, in Indiana, states that he has raised this grain at the rate of 70 bushels per acre.

### Inquiries about Poultry.

Eds. Cultivator—I have been a constant reader of your valuable work, the Cultivator, for the last eighteen months, but, in that time, I have not seen any statement of the profit of fowls when kept exclusively for eggs, with one exception. In the April number, 1851, Chester Moses says, "he keeps from 600 to 700, and they produce annually 100 eggs; each he also says they are allowed to range unconfined."

Now Mr. Editor, this is considerably below my idea of the general average of the number of eggs capable of being produced by one hen of the common variety, if confined to a reasonable space or plat of green pasture, say one acre, and fed with grain and all other things needful, with plenty of good running water.

Dr. J. C. Bennett, in his poultry book, page 206, says 200 is the average number annually. The question I wish to come at is, are both these statements correct, and is the difference accounted for in the different management, one flock running at large, and the other confined.

How much land in good pasture, should be given to an hundred hens, when they are allowed what grain they wish.

Are cocks necessary in a flock of hens, where eggs for the market is the only object? Who is right, Mr. Moses or Dr. Bennett?

About what is the average price of eggs in New-York annually? How many hens should be kept together for health when allowed any desirable quantity of pasture to range in?

If you would inform me in respect to the above inquiries through the medium of your very valuable paper, you will very much oblige me and others in this region of country.

I think of going into the above business extensively, if the information which I seek shall be favorable. I wish, however, to keep on the safe side of the speculation, and be well assured in respect to the matter before taking the first step.

We shall have, in a few months, a continuous line of railroad from this place, (Hudson,) to New-York, almost; and could send eggs to that market or Boston, very quick and safe. H. B. Chamberlain. *Hudson, Summit co,. July*, 1852.

Soaking Turnep Seed in Fish Oil.—Moore's New-Yorker furnishes a communication, showing how *two hundred dollars* were saved in one year, by means of an agricultural paper, which pointed out the remedy of fish oil against the turnep fly, and by which means a large crop was completely saved, while all others in the neighborhood were destroyed. The seed was soaked 48 hours, and then rolled in ashes.

Value of Carrots.—J. W. Lincoln, of Mass., who has for many years used the carrot largely for feeding his domestic animals, including swine, and who has made some accurate experiments in connection therewith, is so thoroughly convinced of their value, that he has been in the practice of purchasing the surplus carrots of his neighbors, at nine dollars a ton.

## ANSWERS TO INQUIRIES.

### Wire Fences, &c.

Eds. Cultivator—I am desirous for information on several subjects, which I think will be interesting to many of your readers. I hope that you or some of your correspondents, will be kind enough to give answers to the following queries: Wire Fence—What size of wire is now considered best in respect to strength and durability? (1.) Might not the lower wires be smaller than the upper. What plan of making it is generally adopted as being best? (2.) Is wire for this purpose made in the U. States, and at what price per ton can it be had, and where? (3.) Weather Board—In cottage designs, published occasionally in the Cultivator, the weather-board appears to be put on perpendicularly, instead of horizontally, as formerly. Is the perpendicular better, or cheaper, or more durable? What width and thickness of plank, and how put on? (4.) C. M. *Sylva Grove, North Carolina, May* 10.

(1.) We have used No. 7 wire for the upper and lower wires, and No. 9 for the intermediate, where less strength from less exposure is required. If of the best telegraph wire, cattle cannot break them.

(2.) Figures and description of the mode of constructing wire fences were given in a late number of this journal.

(3.) We cannot give the desired information, except that we believe good wire for this purpose is kept at most of the principal agricultural warehouses in our cities.

(4.) Vertical weather boards, matched and battened, make not only a more durable siding, but being thicker and completely excluding the air, form a warmer covering from the cold of winter, as well as shut out the heat of summer. If nailed on the horizontal timbers of the building placed near each other, an inch and a fourth, or an inch and a half, are sufficiently thick. But if, as sometimes occurs in small buildings, or in wings of large ones, the only timbers are the plates and sills, they should be two inches thick, and need not be matched, but battened on the joints, both outside and inside. On the inner battens, the lathing is nailed. This constitutes a very substantial and good exterior covering for a house. The width is not essential, but should not exceed a foot, and should be uniform. The battens may not exceed an inch in thickness, nor three inches wide. All are put on with nails. Ed.

### Loss of Plum Crops.

I should like to ask whether any of your numerous correspondents can give a cause why some very thrifty plum trees of different sorts blossom well, and when the fruit gets about half grown, they all fall off. They are perfectly clean and free from canker, and always have been. They are from six to eight years growth. Robert Sanford. *Clinton, Oneida co., N. Y., May* 15, 1852.

This is unquestionably caused by the sting of the curculio, the small beetle whose crescent-like marks on the surface of the young fruit, distinguish it from any other depredator. For a full description of its habits, and of the remedies, our correspondent is referred to any late standard work on fruits, and to former numbers and volumes of the Cultivator. Ed.

### Garget in Cows.

Eds. Cultivator—In answer to further inquiries as to the Garget in milch cows, I can say that I have used the garget root, or pokeweed as it is commonly called, (Phytolacca decandra,) with success. A piece of the root as large as a kernel of corn, given with their food, cut fine, and fed twice a week, has always proved successful in two or three weeks. B. H. M. *Morris, N. Y., July* 12, 1852.

### Domestic Thermometers.

Messrs. Editors—Will you please inform me whether there is such an instrument as a cream thermometer to be had. I wish one to try the cream in the churn before churning; I do not like the common thermometer, as it is too complicated and difficult to clean and subject to injury.

I have written to A. B. Allen of New-York, and he says he knows of no such thing.

I think it ought to be one with the scale marked on the tube, and so protected as to make it durable and easily cleaned.

If such an instrument could be had, I think it would soon come into general use, as it would emphatically be one of our labor saving instruments. C. H. Powell. *Poughkeepsie, May* 22, 1852.

We give the above inquiry an insertion, with the hope that it may attract the attention of some of our manufacturers, not knowing of any such instrument in market. For ordinary purposes, however, thermometer churns may obviate its necessity. Chemists, who find it necessary to determine frequently the temperature of liquids, some times employ a thermometer, the scale of which has a hinge joint just above the bulb, so as to be folded back or upwards, leaving the bulb entirely bare and exposed, whenever it is to be plunged into the liquid. Such an instrument would doubtless be frequently found quite convenient in various domestic operations, such as the management of milk, cream, the manufacture of cheese, butter, &c., and lead to the removal of much of the *guess work* which now so greatly retards accurate, skilful, and successful farming and home economy. Eds.

### Instrument for Milking.

Eds. Cultivator—I take this method of applying to you for information concerning an article for milking cows. There is a "cow milker" for sale in New-York city, but I have not seen it recommended by any agricultural work. If you know anything concerning them, you will confer a favor on one of your readers, by informing him. D. *Middletown, N. Y., May* 26, 1852.

We do not know the nature or operation of the instrument referred to by our correspondent. If it consists of *tubes*, which are thrust into the orifice for the flow of the milk, and held there by gutta-percha cases, we would advise him to have nothing to do with it, as using it a few times so opens the orifice that the milk will run of its own accord and waste, whenever the bag becomes distended. We have known this method of withdrawing the milk to be used thirty years ago, and since, and always with this result. Ed.

### Painting Tin Roofs.

In your July number, D. TOMLINSON inquires respecting the use of paint on tin roofs. If the atmosphere is sufficiently dry to prevent rust, they do not require paint, as a painted tin roof will retain the heat, and cause the sleeping rooms in the attic to be much warmer than with the bright tin, on the principle of radiation. If the atmosphere is damp, to cause rust, the paint will adhere better after the tin is partially oxydized, than when painted on the smooth surface. Yours, S. G. GILBERT. *New-York, July* 9, 1852.

On this subject the Scientific American says:—It all depends upon the climate. In the interior of our country there is no necessity for painting tin roofs, but near the sea-board there is a positive necessity for so doing. In New-York, tin exposed to the rains and mists, without any paint or other covering, soon oxydizes—the iron soon appears through the tin. The reason why this is so, is owing to saline matter being brought from the ocean with our eastern winds. In the Island of Britain, where there is such a moist saline atmosphere, the farmers never feed salt to their cattle; but, at the same time, the farmers there cannot use tin for roofing—it rusts in a few days. In the interior of our country, where the atmosphere is free from saline matter, we have noticed that there was but little use in painting tin roofs. Observation is the only way to acquire correct information about such things. In our city it would be better if tin roofs were not painted for at least six months after they were put on. Tin, when new and handled by the roofers, is greasy, which prevents the paint (unless a great quantito of turpentine be used, which spoils it) from adhering to the tin, and it soon wears off. The exposure, before painting, also, serves to bite into the tin, and affords a good ground for the more intimate union of the paint with the metal.

### Orchard Grass.

EDS. CULTIVATOR—Your correspondent H. B. H., Bristolville, Ohio, asks in the July number of your journal, respecting the value of *Dactylis glomerata* (Orchard Grass.)

I have tried this, very thoroughly, for several years, and I shall never, with the utmost care in its extermination, recover entirely from its effects. I was led to use it from its reputation in doing well under trees. The difficulty is to make it come in *evenly*; the most careful sowing and the greatest quantity of seed will not produce a sod. It comes in sparsely and irregularly, in bunches or tufts; and as it matures earlier than either red clover, timothy, or red top, it must be cut before these grasses are ready, which prevents its being combined with them for hay fields.

The only manner in which I can conceive of its being used advantageously, is sown by itself at the rate of *one to two bushels* to the acre, and never allowed to seed, but cut two or three times a year for soiling. It is very early, and makes a strong nutricious, but not close or abundant pasture, and if allowed to seed, gradually overruns, in single spires or stools, one's whole place. My lawn is very much injured in this way, and the roots being stocky and long, they are difficult to destroy.

My experience, and that of my neighbors, (whose fields have suffered from my seeds wafted over,) is very much opposed to it. It makes very coarse hay. H. W. S. *Fishkill Landing, July* 5, 1852.

### Information Wanted.

BURNING LIME FOR AGRICULTURAL PURPOSES.—I wish for information as to the best mode of burning lime for agricultural purposes. I want directions as to the method of building a kiln—the most durable material to build it of—also the difference between what is called a perpetual kiln, that is one in which a constant fire is kept. I will have to use wood for fuel. I wish to build a kiln that will hold say 1,000 bushels, and want to know the shape and dimensions. What is the cost per bushel for burning lime? Answers to the above, or any other questions in regard to lime, or the mode of applying it, will much oblige a seeker after improvements. ISAAC A. CLARK. *Marion, N. Y., June* 17, 1852.

ARTESIAN WELLS.—Where can I get a scientific and practical Artesian well borer? What is the expense of boring?

I have a well about 12 or 13 feet deep, and would like to bore for water in it, but do not know where to get an experienced man, or the tools, or the tube. If I could be successful in finding a bountiful supply of water, I have no doubt several of our neighbors would give employment to a successful man. The soil here is generally clayey or gravel. ELIAS A. BROWN. *Minaville, Montgomery co., N. Y., July* 9, 1852.

CHANGING THE GROWTH OF HORNS.—I have a yoke of valuable three year old steers. One horn of one of them, lops about three inches at the point below the level of the other. If you or any of your correspondents will inform me of any way that I can bring the horn up to a level with the other, without endangering the life of the horn, I shall feel very much obliged. N. W. Moore. *West Turin, Lewis co., N. Y.*

THE USE OF UNLEACHED ASHES.—I have heretofore received a heavy addition to my crops of grass, in consequence of using unleached ashes, but am not satisfied whether the use of them does not tend to impoverish the land, and should be glad to have some one of more experience reply to such a question.

My method of using them has been to sow them on the old sward in the spring, at the rate of about 15 bushels to the acre—doing nothing more than to sow them as evenly as convenient with a shovel. I have used them on different soils, some of which has been gravelly and warm, and have received the greatest benefit when I have put them on a soil which is rather cold and heavy, having a little clay intermixed. D. G. W.

FERTILITY IN CLOVER ROOTS.— R. W. Currier informs us in the Granite Farmer, that he has found by experience, that the roots of a good thickly sown crop of clover, by two years' rotting, is worth as much as 12 or 15 loads of manure.

SALT FOR CATTLE.—The Prairie Farmer asserts from experience, that in the malarious region of the west, more disease may be prevented by salt among cattle, than by any other one thing.

## NEW PUBLICATIONS.

THE HISTORY OF THE RESTORATION OF MONARCHY IN FRANCE, by A. De Lamartine. Vol. II., Harper & Brothers, New-York.

The first volume of this work has been for some time before the public, and has been read with avidity by lovers of the graphic style in which it is written. In vivid delineation of character, and life-like portraiture, LAMARTINE has few equals; but as a historian he lacks system. With the fervor of a poet, and the impetuosity of an enthusiast, he hurries the reader from one scene to another, to find just what he has previously advertised lay concealed there. As a whole, the work shows too much prejudice, and too little judgment—exhibits the power of "first impressions" to sway the reason and prevent that impartiality which the historian owes to his subject and the age.

LONDON LABOR AND THE LONDON POOR, by Henry Mayhew. Harper & Brothers, New-York.

Part 19 of this publication is on our table. It places in its true light, the situation of the laboring classes in the great metropolis of the world. The statistics and information here presented, are fearful evidences of the wretchedness and want that prevails in crowded cities; and one wonders that where inducements to crime and vice are so great, so little actually comes to light.

HARPERS' NEW MONTHLY MAGAZINE. Harper & Brothers, New-York.

The July No. contains a beautifully illustrated description of the United States Armory, at Springfield, Mass., by JACOB ABBOTT. The article on NAPOLEON and Bleak House are continued. All the departments of this Magazine are well sustained, and do credit to the enterprising publishers, who are, by its agency, spreading far and wide a literature which will leave an impress on its thousands of readers.

A NEW SYSTEM OF FRENCH GRAMMAR, containing the first part of the celebrated Grammar of Noel & Chapsal; by Sarah E. Saymore. Harper & Brothers, New-York.

The peculiarities of this Grammar are thus spoken of in the preface: "It has been found that by the help of this work, the teacher from France, with but an imperfect knowledge of the English Language, can give lessons with the most perfect accuracy, imparting the true pronunciation in a manner truly admirable and encouraging to the learner, while the English and American find a complete system of conversation, embracing every variety of idiom, in the peculiar and familiar style of conveying instruction in this most popular language of Europe."

BLEAK HOUSE, by Charles Dickens. Harper & Brothers, New-York.

This work is being issued in numbers, in a neat and attractive style. It is not necessary to commend the writings of an author so widely and favorably known as DICKENS. His stories have a moral—they are told with a purpose, and to some purpose. In common parlance, the last is always the best; consequently every one who has ever read Dickens, will read Bleak House.

THE WORKS OF STEPHEN OLIN, D.D. L.L.D. Harper & Brothers, New-York.

The reading public, and more especially the religious part of it, are under obligations to the publishers for these volumes of sermons and sketches. They will be found full of thought, expressed in a clear and forcible manner, and particularly suggestive to the young mind.

MARCO PAUL'S VOYAGES AND TRAVELS; by Jacob Abbott. Harper & Brothers, New-York.

These are a series of books written for children, in a pleasing style. They contain a great amount of geographical information, well set off by a variety of incidents and characters. The plates are finely executed, and add much to the value of the works. The following is the order of the series:

1. Adventures in New-York.
2. " on the Erie Canal.
3. " in Maine.
4. " in Vermont.
5. " in Boston.
6. " at Springfield Armory.

The above publications of Messrs. HARPER & BROTHERS, are for sale by E. H. PEASE & Co., of this city.

LITTELL'S LIVING AGE. E. Littell & Co., Boston.

We would not be deprived of the weekly visits of this excellent publication, for any consideration. The English periodical press excels our own in depth of thought and correctness of diction—its judgment is less impassioned and its opinion less hasty. Littell's Living Age republishes such articles from foreign publications as are best suited to American taste, and always serves its readers with viands which do not spring from our own soil. As a wholesome check upon the radicalism of the day; as a strong incentive to thought; as a means of information and education, this work stands foremost in its class.

## Things in Albany County.

EDS. CULTIVATOR—I have been thinking for some time that I would give you a short history of some matters in Albany county, as I have seen but little in relation to our affairs. Although we have been silent, yet we think we have some as good cattle and sheep as our sister counties; for an example, I bought, a little more than a year since, a French Merino buck lamb, which sheared for me 22½ pounds of wool, besides serving 104 ewes, from which I raised 108 lambs, and sold of this number 86 for $1,386. This shows conclusively that they must be pretty good. Again, I have just sheared a French Merino ewe, a little more than a year old, which sheared 22 pounds. The buck and ewe named, I shall probably exhibit at the State Fair.

I have a yoke of Devon twin oxen which have puzzled many a man to tell which was the largest, or which was the darkest colored, and finally to tell them apart in any way. The best judges in this county say they are the closest match that they have ever seen. These also will be exhibited at the state fair. JOSEPH C. WEEDEN.
*Preston Hollow, July 3, 1852.*

TO MAKE CORN STARCH.—The ripe grain must be mashed and ground to a fine meal, and then placed in a glazed mortar, and rubbed and triturated with a small quantity of water, until all the corneous particles are broken down. It is then to be transferred to a fine linen filter, washed, and expressed with successive portions of water. The liquid that passes through, must be allowed to stand for sixteen or twenty hours, for the sediment or starch to subside. The water is then to be drawn off and the residue dried in the usual manner.

This is the simplest and cheapest mode yet known for preparing the corn starch for pudding and other useful applications. E.

### Breeding Stock.

EDS. CULTIVATOR—I have been a reader of agricultural papers for many years, and frequently feel a desire to *shed ink* in the cause; but, by patiently waiting, have generally found my subjects ably treated by better pens. I dream of good cattle, and acknowledge receiving many a valuable hint on breeding, from the articles, with which the Cultivator, from time to time, has favored us, upon this subject. I was much interested, and have read and re-read the article in the May number, from the pen of Dr. CLEAVELAND, respecting "An influence affecting the purity of blood in stock." It is true much disappointment is often met with in breeding animals of good pedigree, but this is commonly traceable to other causes, than that assigned by the Doctor. How common it is, in looking over a herd, to have some particular excellence or defect pointed out, and traced to some remote progenitor. I have in my mind's eye now, a celebrated bull, the best I ever saw, for fullness of points and depth of pedigree, many of whose get, for color and marking, go back several generations, and some of them (the taint may be in the cows, of course) go —— nobody knows where, to an inferior cross evidently.

It is laid down as a rule, that "The mother's system is influenced and changed, by the young she carries in her womb, and if the male parent be of a different breed, her blood is contaminated, and she rendered similar to a mongrel for the remainder of her life."

This assertion would be startling if true; but that nature, in some of her freaks, should *occasionally* produce something which would warrant the above, is nothing strange. All females are more or less imaginative, and liable to mark their young.

The story of Jacob and his peeled rods, is familiar to all. A more modern instance is on record of a polled cow, which, while in heat, was with a red and white horned ox, and the same day was served by a red polled bull, both of pure blood; yet in due season she produced a red and white horned calf.

A breeder of Devons in this state, having pastured a lot of marked cattle with his cows, was constrained the next season to veal most of his *pure bred* calves, for they were badly marked with white. I remember reading of the mongrel Quagga colt several years ago; it was then supposed that the *imagination*, and not the *blood* of the dam was affected. I live in a neighborhood where Short-horn, Devon, and Polled cattle, are bred, and extensively crossed with the *native* breed—some using first one, then another; and in hundreds of instances of cows thus served, have not yet seen the first trace of the blood of a previous sire. I own a valuable bull, whose services are in good demand; now, if the Doctor's theory is true, how unwise are my friends to pay me $5.00 for calves from old cows, whose blood has been *contaminated* by inferior bulls. The most sanguine of our breeders can never hope to see the various pure breeds occupying the place of the common cattle of the country. The true course for farmers will be to send their best cows to well bred males. This course, steadily followed for a few years, will give us a stock, that for all practical purposes, except bull breeding, is fully equal to any imported; yet were not the above theory of contamination fallacious, how utterly futile would be such efforts at improvement. In conclusion, allow me to say, that I write not as one *having authority*, but as one who six days of the seven wears THICK BOOTS.

### Exhibitions and Cattle Shows for 1852.

NATIONAL.

*American Institute*, New-York.—Exhibition opens at Castle Garden, Oct. 5. Cattle Show, Oct. 19, 20, 21.

*American Pomological Congress.*—Commences its session at Philadelphia, Sept. 13.

STATE.

*New-York*—At Utica, ..... September 7, 8, 9, 10
*Ohio*—At Cleveland, ..... Sept. 15, 16, 17
*Michigan*—At Detroit, ..... Sept. 22, 23, 24
*Indiana*—At Indianapolis, ..... Oct. 19
*Pennsylvania*—At Lancaster, ..... Oct. 20, 21, 22
*Georgia*—At Macon, ..... Oct. 19 to 23
*Maryland*—At Baltimore, ..... Oct. 26, 27, 28, 29
*Wisconsin*—At Milwaukie, ..... Oct. 6, 7, 8
*Vermont*—At Rutland, ..... Sept. 1, 2, 3
*Rhode Island*—At Providence, ..... Sept. 15, 16, 17

PROVINCIAL.

*Canada West*—At Toronto, ..... Sept. 21, 22, 23, 24
*New-Brunswick*—At Frederickton, ..... Oct. 5 to 9

COUNTY SHOWS—NEW-YORK.

Cayuga—Auburn, ..... Oct. 6, 7
Clinton—Keeseville, ..... Sept. 22, 23
Cortland—Cortland Village, ..... Sept. 15, 16
Dutchess—Washington Hollow, ..... Oct. 5, 6
Genesee—Bergen, ..... Oct. 6, 7
Greene—Cairo, ..... Sept. 21, 22
Herkimer—Herkimer, ..... Sept. 28, 29
Jefferson—Watertown, ..... Sept. 16, 17
Madison—Eaton, ..... Sept. 22, 23
Orange—Middletown, ..... Sept. 29, 30
Oswego—Fulton, ..... Sept. 29, 30
Otsego—Morris, ..... Sept. 22, 23
Putnam—Carmel, ..... Oct. 5, 6
Wayne—This county holds two fairs—one at Wolcot, ..... Sept. 21, 22
The other at Palmyra, ..... Sept. 28, 29
Saratoga—Mechanicsville, ..... Sept. 15, 16, 17
Rensselaer—Troy, ..... Sept. 22, 23, 24
Essex— —— ..... Sept. 20, 21 22
Suffolk—Huntington, ..... Sept. 22
Seneca—Waterloo, ..... Oct. 14, 15
Monroe—Rochester, ..... Sept. 29, 30
Ontario—Canandaigua, ..... Sept. 29, 30

TOWN SOCIETIES.

East Bloomfield, ..... Oct. 5, 6
Cape Vincent, ..... Sept. 15

MASSACHUSETTS.

Berkshire—Pittsfield, ..... Oct. 6, 7
Essex—Lawrence, ..... Sept. 29, 30

CONNECTICUT.

Franklin—Greenfield, ..... Sept. 29, 30
Middlesex—Concord, ..... Oct. 6
Middlesex—Middletown, ..... Oct. 6, 7, 8

VERMONT.

Addison—Middlebury, ..... Oct. 6
Bennington—North Bennington, ..... Sept. 22, 23
Franklin—St. Albans, ..... Sept. 8, 9
Windham—Fayettville, ..... Sept. 15, 16

NEW-JERSEY.

Burlington—Mount Holly, ..... Oct. 6

PENNSYLVANIA.

Berks—Reading, ..... Oct. 1
Bucks—Newtown, ..... Oct. 7, 8
Montgomery—Norristown, .....
Philadelphia—Near Philadelphia, ..... Sept. 30, and Oct. 1
Susquehanna—Montrose, ..... Oct. 6
Northumberland—Northumberland, ..... Oct. 7, 8

OHIO.

Cuyahoga—Cleveland, ..... Oct. 6, 7

MICHIGAN.

Lenawee—Adrian, ..... Oct. 6, 7

BEES ROBBING ONE ANOTHER.—A correspondent of the Genesee Farmer says he has tried several ways to prevent bees robbing each other, and all have failed but this: He changes their position, putting one in the place of the other, and *vice versa*, by which means he has never failed to stop them in less than half an hour.

FAT OXEN.—The Prairie Farmer maintains that nearly all the fat cattle of this country, are greatly over-estimated in weight—and states that the *Rust ox* of Syracuse was estimated at 4,000 lbs., and actually weighed but 3,100 alive.

## NOTES FOR THE MONTH.

Acknowledgments.—Communications have been received, since our last, from R. Watkins, J. G. Gilbert, Geo. Campbell, H. B. Chamberlin, E. A. Brown, F. Holbrook, H. Bird, Edmund Harris, Thick Boots, B. H. M., H. W. S., J. O. Phelps, E. L. Brown, J. C. Weeden, John T. Andrew, F. P. Dann.

Trial of Ag. Machines at Geneva.—As we are obliged to send this number to press before this trial takes place, which is to commence on the 20th, we can, of course, give no account of it until next month. It will be seen from the annexed list of entries, already made, and for which we are indebted to the Secretary, Mr. Johnson, that there is to be a spirited competition for the premiums. The judges will enter upon their labors with the full determination to make a thorough examination and trial of all the machines entered, and we cannot but anticipate the most important results to our farming interests, from their labors. The entries are as follows:

GRAIN REAPERS.

1. J. H. Manny, Waddam's Grove, Illinois, Manny's Patent Adjustable Reaper.
2. B. Densmore, Brockport, Self-Raking Reaper.
3. C. H. McCormick, Chicago, Virginia Reaper.
4. T. R. Hussey & Co., Auburn, Hussey's Reaper.
5. A. C. Powell, Syracuse, Rugg's Reaper.
6. Danford & Co., Geneva, Ill., Danford's Double Sickle Reaper.
7. A. J. Cook, Enon, Ohio.
8. T. D. Burrall, Geneva, Convertible Reaper.
9. Seymour & Morgan, Brockport, New-York Reaper.
10. Rapalje & Co., Rochester.
11. Aaron Palmer, Brockport, Self-Raking Reaper.

MOWING MACHINES.

1. Howard & Co., Buffalo, Ketchum's Mower.
2. T. Rush Spencer, Geneva, Bronson Murray's Mower.
3. C. H. McCormick, Illinois.
4. A. C. Powell, Syracuse, Rugg's Mower.
5. A. J. Cook, Ohio.
6. J. D. Burrall, Geneva.
7. J. H. Manny, Illinois.

HORSE POWERS.

*Sweep or Lever principle*

1. J. A. Pitts, Buffalo.
2. Eddy & Co., Union Village.
3. David Woodbury, Palmyra.

*Endless Chain.*

4. Emery & Co., Albany.
5. George Wistingham, Schoharie.
6. E. W. Badger, Fly Creek, Otsego.
7. J. A. Pitts, Buffalo.
8. J. Rapalje & Co., Rochester.

*Iron Power.*

9. John A. Pitts, Buffalo.

GRAIN DRILLS.

1. P. Seymour, East Bloomfield.
2. Henry Huffman, Macedon.
3. Rapalje & Co., Rochester.
4. Foster, Jesup & Co., Palmyra.

SEED PLANTERS.

1. Emery & Co., Albany.
2. C. C. Van Every, Victor.
3. P. Seymour, East Bloomfield.
4. Rapalje & Co., Rochester.
5. Foster, Jesup & Co., Palmyra.
6. D. P. Daggett, Palmyra.

THRESHERS.

1. Emery & Co., Albany, Thresher and Separator.
2. Eddy & Co., do
3. J. A. Pitts, do
4. C. B. Salmon, Palmyra, do
5. D. Woodbury, Palmyra, do
6. Geo. Westingham, Schoharie. do
7. E. W. Badger, Fly Creek, do
8. Rapalje & Co., do

Sale of Devon Cattle.—The attention of the admirers of this valuable breed of cattle, is invited to the advertisement of Mr. Cowles, of Farmington, Conn.

Mr. Allen's Great Cattle Sale, it will be remembered, is to be held at the homestead farm of Gen. Van Rensselaer, on the Troy Road, about two miles above this city, on Wednesday the 18th of this month, when over one hundred head of blood stock will be offered, being the largest sale that has ever occurred in this country. We anticipate from Mr. Allen's reputation as a breeder, a large attendance from all parts of the country, and a spirited competition in bidding for this fine herd. Catalogues can be had at this office.

Mr. Vail's Sale of Thorough-bred Short-horns.—It will be seen by an advertisement in this number, that Geo. Vail Esq., of Troy, proposes to offer his entire herd of thorough bred Durham Cattle at public sale, in October next. His herd, it is well known, comprises some of the best blood in England, he having made several importations, both of bulls and cows, within the last ten years. While we sincerely regret that Mr. Vail has come to the conclusion to sell out his most valuable stock, and to retire from the field as a breeder, we congratulate the public upon the opportunity thus afforded them of procuring animals from this high bred herd. No one, we believe, has been more successful than Mr. Vail, as a breeder, as is shown by the high prices at which his stock has heretofore sold, and the sale now advertised cannot fail to attract the attention of those engaged in breeding, as well as farmers generally.

Drouth.—In this section of the state, and a great part of Vermont, crops are suffering severely from the drouth. Grass particularly, is very light, and will not cut half the average crop. A correspondent from Vermont says, "that cattle are being turned into many meadows in the southern part of the state." Unless farmers stir themselves immediately, there must be a great lack of fodder the coming winter. It is not, however, too late to raise turneps, or to sow corn and oats, to be cut green for fodder.

Conveying Manure in Liquids.—It is said that in Germany, some sixty-two square miles of soil has been made by simply driving muddy water, through earthern pipes, extended over a sand desert. The pipes are strong, and hard burnt, and cost less than half as much as iron pipes.

Connexion Between Roots and Leaves.—It is well known that the growth of roots depend on the leaves. J. C. Nesbit states in one of his lectures, "A friend of mine in Northamptonshire, cut two portions of a clover field at mid-summer; one was then fed close with sheep, the other grew. The former, (fed close,) yielded 35 cwt. of clover roots per acre—the other 75; showing the importance of a full growth for large roots, and for a good crop for manure."

Balky Horses.—It is said to be a first-rate way to treat balky horses, by hitching a good steady horse and team behind them—they will soon forget their peculiar propensities, and be glad for a chance to move the other way.

Willows.—We are informed that there are five million dollars worth of willows imported every year into this country, from France and Belgium, for baskets, &c., selling for $125 per ton. An acre of willow in England,

ten years from planting, has been sold for $775. $1,000,000 are paid for willow baskets in New-York city.

Breaking Halters.—It is a serious fault for a horse to pull at his halter. An animal of this character was tied to a stake on the bank of a stream, with his tail towards the water. He snapped the halter, tumbled over the bank, floundered in the water to his heart's content, and afterwards was willing to remain "*at his post.*"


## The Water Cure Journal.

A NEW VOLUME commences with the present July number. Published monthly, illustrated with engravings, exhibiting the structure, anatomy, and physiology of the human body, with familiar instructions to learners. It is emphatically a Journal of Health, designed to be a complete Family Guide in all Diseases.

Terms.—Only One Dollar a Year, in Advance. Please address, post-paid, FOWLERS & WELLS, No. 131 Nassau street, New-York.

A few brief Editorial Notices may be acceptable to those unacquainted with this Journal. We copy:

From the New-York Tribune.

"The Water Cure Journal holds a high rank in the science of health; always ready, straight-forward, and plain spoken, it unfolds the law of our physical nature, without any pretensions to the technicalities of science, but in a form as attractive and refreshing as the sparkling element of which it treats."

From the Fountain Journal.

"Every man, woman, and child, who loves health, who desires happiness, its direct result, who wants to 'live while it does live,' 'live till he dies,' and really live, instead of being a mere walking corpse, should become at once a reader of this Journal, and practice its precepts.."

From the New-York Evening Post.

"*The Water Cure Journal.*—This is, unquestionably, the most popular Health Journal in the world."

This Hydropathic Journal now enters upon its Fourteenth Volume, with a circulation of *Fifty Thousand Copies*. The ablest medical writers are among its contributors, and all subjects relating to the Laws of Life, Health, and Happiness, may be found in its pages Now is the time to subscribe. August 1—2t.

## FOR SALE.

A BULL 15 months old, bred by Fisher Sheafe, Esq., out of the fine Durham Cow Red Rose, by the celebrated imported bull Duke of Exeter—a fine young animal; will be sold for $70. Color of the same rich red that was so much admired in his sire, with a very little white. Duke of Exeter sold at auction, for $500 when 2 years old. The mother took the premium at the County Agricultural Fair, and is now giving 20 quarts of rich milk per diem. The above low price is submitted to because the animal is getting to that age, that the present owner has no facilities for keeping him. He is perfectly quiet and kind. Apply immediately, to F. E. & A. FIELD, 13 Platt-st.
August 1—1t.* New-York City.

## Bedford Land for Sale.

I OFFER for sale the tract of land on which I reside, lying in the county of Bedford, Va., near the Blue Ridge, 25 miles west of the town of Lynchburg, 10 miles south of the James River canal, and eight north of the Virginia and Tennessee Railroad. The tract contains 427 acres, of which near 200 are the low grounds of the north fork of Otter creek, the remainder *Red upland*. All the low grounds, and about 70 acres of the uplands are cleared, and under the use of clover and plaster, have been already raised to a high degree of fertility; producing fine crops of grain and tobacco. The low grounds possess the somewhat rare advantages of *complete* exemption from overflow; of early maturity of the wheat crops which greatly diminishes the liability to rust; and in consequence of thorough under-draining, of never suffering from standing water after heavy rains. Grass may be successfully cultivated on any part of them, but there are from 20 to 30 acres especially adapted to meadow. Most of the wood land would produce fine tobacco. The improvements consist of, 1st, a handsome, a spacious dwelling of brick, with eight rooms, exclusive of a pretty dry and well ventilated basement. This house has just been erected of the very best materials, in plain handsome style, with special regard to comfort and convenience of arrangement; 2d, of a large and convenient barn 60 by 44 feet, with a basement so arranged as to afford shelter for stock and storage for root crops; excellent stables and cow houses, good Negro houses, store, weaving and wash rooms, tobacco barns, &c. All these out-houses have been erected within a few years. In a word, a very small outlay is needed to perfect a plan of improvement, which when completed, will render this one of the most beautiful and desirable farms and residences in this section of the State. It is exposed to market, only because the feeble health of the owner renders necessary a removal to a warmer climate.

☞ Communications may be addressed to Davis' Store, Bedford co., Va. Aug. 1—3t. WM. DAVIS.

## Great Sale of Superior thorough-bred Short-Horn Cattle.

THE subscriber will offer for sale, his entire herd of choice Short-horns, comprising 50 head, young and old, at public Auction, on Wednesday the 13th of October, 1852, at 1 o'clock, P. M., at his farm 2½ miles from the city of Troy; reserving to himself one bid on five Cows and Heifers and one Bull, say six head in all, and these to be pointed out previous to the commencement of the sale; this bid will be made public when the six animals are brought to the stand for sale. Should any gentlemen advance on the single bid made by the proprietor, the highest bidder will be entitled to the animal. It is proper to say, the severe drouth in this vicinity reducing the hay crop one half, has decided the proprietor to make this sale at the time named, instead of next June, which he had purposed to do.

The well established reputation of this herd in this Union, and in Canada, and the splended herd it has measurably sprung from, viz: the famed herd of that eminently English breeder the late Thomas Bates, Esq, renders it hardly necessary to comment upon its superior merits. It may not, however, be inappropriate to remark, that the establishment of this herd was commenced in 1838, and that the most careful attention has since been paid to its breeding, and that it now contains mostly all the reserved stock of two former public sales. And besides these he has now on the passage across the Atlantic, shipped 21st June, on board the Packet Ship Kossuth, Capt. Jas. B. Bell, a superior yearling roan Bull, having many crosses of the famed Duchess Bulls of Mr. Bates. Including this latter animal and the two beautiful red roan three year old Heifers, which came out from England last September, "Yarm Lass" and "Yorkshire Countess," and the beautiful Heifer Calf of the latter animal, got in England by the Duchess Bull 5th Duke of York, there will be 14 head of this imported stock, and its immediate descendants. There has been sold from this herd but three Heifers from these importations, and these cows were sold at $300 each. All the young bulls bred from these cows, except those now offered for sale, have also been sold at private sale, at $300 each, most of them while quite young.

Besides these 14 head of high bred animals, the noble premium cow Esterville 3d, bred by E. P. Prentice, Esq., of Albany, and the equally fine two year old, red and white Heifer bred by me, got by the Bates Bull Meteor, and three of the famed milking Willey tribe, the same tribe of cows as the Heifer Ruby, sold by me to Mr. S. P. Chapman of Madison county, and which cow was awarded the first premium by the N. Y. State Agricultural Society, for producing the largest quantity of butter in 10 days in June, and 10 days in August, on grass pasture only, being a fraction over 40 lbs. in those 20 days. There are other valuable tribes in the herd, as the printed Catalogue will show.

The catalogue will be ready for distribution about the 1st of August, and will exhibit richness of pedigree rarely to be met with, showing the descent of most of the animals, from the best animals on record in the English herd book. Having received an invitation from H. Strafford last winter to forward a list of the pedigrees of my herd to be inserted in the forthcoming volumes of the English herd book, of which Mr. Strafford is now the editor, several pedigrees were sent to him of the animals here offered for sale, and will appear in said book.

A credit of 9 months will be given on all sums up to $300, and 9 and 18 months on all sums over $300, for approved paper, with interest, payable at some bank in this State. GEO. VAIL.
Troy, N. Y., Aug. 1—3t.

## Thorough-bred Devon Stock at Auction.

THE subscriber will offer at public sale, on Wednesday, the 25th August, 1852, at his residence, in Farmington, Conn., about 30 head of pure Devon Cattle, consisting of Cows, Heifers, Bulls, and Bull and Heifer Calves.

This stock was derived principally from the herds of Geo. Patterson, Esq., of Maryland, R. L. Colt, Esq., of New-Jersey, Messrs. Hurlbuts of Winchester, and from imported stock—and have been selected and bred with a particular reference as to their dairy qualities. All cows and heifers offered are, or will be previous to the sale, in calf to my prize bull Prince Albert, a descendant of Geo. Patterson's celebrated imported bull Eclipse, and my prize cow Victoria, which was awarded the first premium at Albany, in 1850, of $25, as the best Devon Cow exhibited in the class of foreign stock, and sold at the same time to a gentleman in Vermont, for $180.

Catalogues, giving a particular description of each animal, with their pedigrees, can be had at the offices of the principal Agricultural Journals, or on application to me, by mail or otherwise.

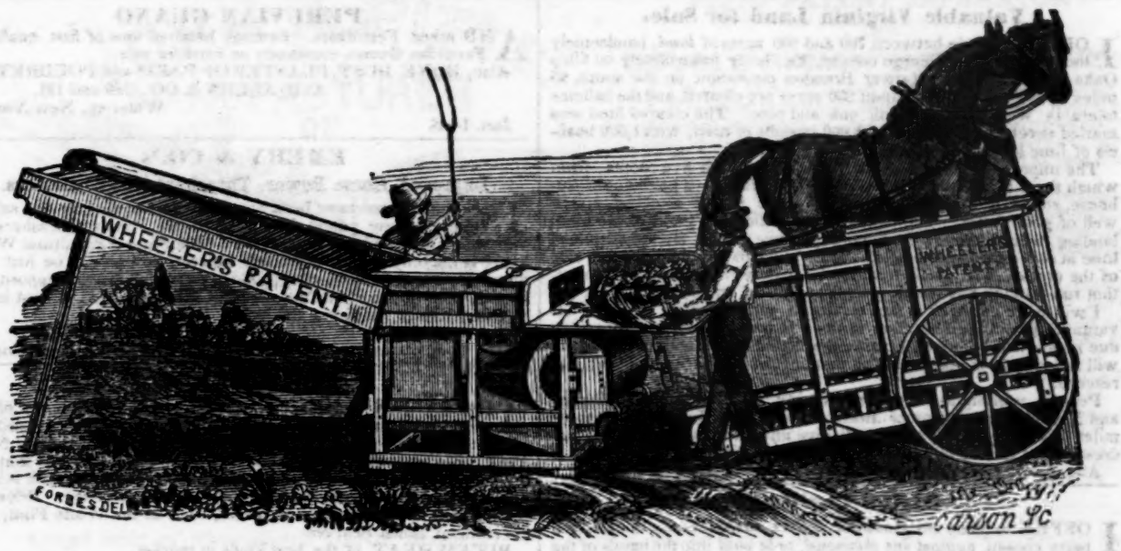
The sale will take place at 12 o'clock A. M., the 25th inst., and the stock will be ready for examination at 10.

I will also offer at the same time and place, my superior Morgan Stallion Young Gifford, five years old, a colt of the old Gifford Morgan, and from a Morgan mare. Also a Morgan Filly 1 year old the 12th of May last, by the above horse, and from a fine Morgan mare bred by Ambrose Arnold, Esq., of Westminster, Vt., a superior colt.
Farmington, Ct., Aug. 1—1t. WM. L. COWLES.

## Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—1f. Ferrisburgh, Addison co, Vt.




# New-York State Agricultural Works, Albany, N. Y.

## BY WHEELER, MELICK & CO.

THE subscribers, in order to meet the increasing demand for their Horse Powers and Threshers, and Combined Threshers and Winnowers, and other machines, have recently added to their manufactory a commodious furnace, so that every article of importance used in the construction of their machines is now made under their immediate inspection. They are thus able to assure their customers, that their work is of the most perfect character, both in workmanship and in the quality of materials used, and in this respect, as wellas in all other desirable qualities, they invite comparison of their Agricultural Machines, with any others in the world.

Among the articles we make are, Wheelers Patent Railway Chain Horse Power and Overshot Thresher and Separator, (for either one or two horses,) *Wheeler's Patent Combined Thresher and Winnower*, (worked by only two horses,) Wheeler's Clover Hullers, Straw and Stalk Cutters, Circular Saw Mills, Horse Powers geered for Churning in large Dairies, &c.

With the exception of the Combined Thresher and Winnower, (which is a new invention of last year) our machines are so widely known as to need no commendation. It is sufficient to say that every article made by us is *warranted to give satisfaction* or it may be returned after a reesonable trial.

*The Combined Thresher and Winnower* was introduced into the market towards the close of last season, and is in exceeding high favor. We entertain no doubt that it is the most perfect, compact, and efficient machine now in use, for threshing and winnowing grain, and it certainly is far the cheapest and most economical. In our former advertisements, in the April and May numbers of this paper, we have given numerous letters from persons who, having used this Winnower, express the highest approbation of its merits Since then we have received a number more from different states of the Union, but have only space for the two following.

From T. Waters, Esq., of Shop Spring, (Tenn.,) dated June 24, 1852.

Messrs. Wheeler, Melick & Co.—I have just returned from W. T. Waters', whose Thresher and Winnower was put in operation this morning. He is as well pleased with it as he anticipated. He can dispose of it at cost, and thinks he will do so, and order another machine from you. My own machine has not arrived yet.

From W. D. Bacon Esq., of Wisconsin, dated July 2, 1852.

Messrs. Wheeler, Melick & Co.—I am using, to day, the Thresher and Winnower you sent me, and it far exceeds my expectations, in the perfect manner in which it performs its work. I have had several gentlemen witness its operation, and all concur that it is an extra machine.

We could add others equally flattering if space permitted.

Price of Double Power with Thresher and Winnower,.... $225
" Thresher and Winnower (without Power,)..... $115

### Double Power and Overshot Thresher and Separator.

The superiority of Wheeler's Patent Railway Chain Horse Power, and Overshot Thresher and Separator, is universally acknowledged. Thousands of them are in use, many of which have threshed from 50,000 to 100,000 bushels of grain, and are still in good condition. Probably more than four times as many of these machines were sold during last year as of any other kind. They are, beyond doubt, the most durable and economical machine in use. Their capacity has been tested by repeated trials, as well at the New-York and Pennsylvania Fairs, as on several private occasions in competition with another machine made in this city, which has been advertised to be far superior to ours, and in every instance the result has been about *one-third*, and in some instances more, in favor of our machines. In every case except one, where we have submitted our machines to a *working* test at Fairs it has taken the highest premiums, and in that excepted case the Committee decided that our machine performed its work in eight minutes and its competitor in 11½ minutes, being nearly one-third in favor of ours.

We have also exhibited ours in competition with the same machine at the State Fairs in Ohio, Michigan and Pennsylvania, and also at the Provincial Fair in Upper Canada, at all of which we received the highest premiums, viz: In Ohio a Silver Medal and Diploma; in Michigan $20; in Pennsylvania $10; and in Canada a Diploma.

We have numerous similar testimonials, from County Societies, where we have always received the highest premiums awarded to Chain Powers.

Price of One Horse Power, Thresher, Separator and Belting,.. $120
Two Horse, do.,..... 145

### Single Horse Power and Thresher and Separator.

This machine is well adapted to the use of Farmers raising an ordinary quantity of grain; with two or three hands it is capable of threshing from 60 to 100 bushels of Wheat per day, or twice that quantity of Oats. The same power is also used for churning, and for driving Circular and Cross Cut Saws, Cutting Feed, driving Grindstones, elevating Grain, Pumping, &c.

Price of Power geared for Churning and driving Cross Cut Saw and for Threshing, &c.,..... $92
Belt for driving Thresher, &c.,..... 5
Thresher and Separator,..... 35

### Single Horse Power and Churning Machine.

This machine has been extensively used in large dairies and with the most satisfactory results. The power is found to be peculiarly adapted to Churning, the propelling force being produced by the weight of the horse to an amount sufficient to drive four or five barrel churns; the motion is varied by altering the elevation of the Power so as to produce all the changes in speed required in the different stages of the process of Churning: this is done by means of a lever and without stopping the Horse, so that the motion is always under the control of the person in charge. The Power is the same as that made by us for Threshing, &c

### Wheeler's Feed Cutter.

This machine is made expressly for Horse Power use, and is very strong and substantial. It cuts not only corn stalks but hay and straw with equal facility, and does its work with great rapidity.

Price,..... $28

### Lawrence's Saw Mill.

This mill is much used on railways for sawing wood for locomotives, as well as by farmers for cutting stove fuel. With a one-horse power it will cut from 10 to 15 cords of wood, twice in two, per day.

Price, (with 24 inch saw,)..... $35

### Wheeler's Clover Huller.

This machine is compact, simple, and durable. It does its work perfectly without injuring the seed, and is capable of hulling from 5 to 15 bushels of Clover Seed per day, with one horse.

Price,..... $28

### Trojan Plow.

The Subscribers are also the *sole agents* in Albany for the sale of the celebratad "*Trojan Plow*," made by N. B. STARBUCK, of Troy. These Plows are doubtless superior to any other kind in use, and will be sold by us at the manufacturer's prices.

☞ All Machines made and sold by us are *warranted to give satisfaction*, or they may be returned after a reasonable time for trial. Orders are solicited and will be promptly filled.

WHEELER, MELICK & CO.,
Corners of Hamilton, Liberty, and Pruyn streets,
Aug. 1—1t. (Near the Steamboat Landing.) Albany, N. Y.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

### Valuable Virginia Land for Sale.

I OFFER for sale between 700 and 800 acres of *land*, handsomely located in Prince George county, Va., lying immediately on Chip Oaks Creek, adjoining Lower Brandon plantation on the south, 25 miles from Petersburg. About 200 acres are cleared, and the balance tolerably well timbered with oak and pine. The cleared land was marled several years ago, and 1,000 bushels of marl, with 1,500 bushels of lime have been recently applied to it.

The improvements are a good brick house, with five rooms—from which there is a beautiful prospect of James River—a kitchen, smoke-house, stable, a barn with stationary horse power attached, and a well of good water. The buildings are within 300 yards of the main landing where vessels load with produce, wood, &c., and unload lime at seven cents per bushel. Marl abounds on the opposite side of the creek. The whole tract is well watered by springs and brooks, that run through fine meadow lands, a part of which are cleared.

I will sell it entire or in parcels to suit purchasers, as it can be advantageously divided into four farms. If not sold privately, (of which due notice will be given,) before the 30th day of September next, I will sell it upon the premises, on that day, at public auction, without reserve.

Persons wishing to view the property, will leave the Richmond and Norfolk boat at Lower Brandon wharf on James river, three miles from the property; or I will give any information to those addressing me (post-paid) at Cabin Point P. O., Surrey county, Va.

Aug. 1—2t. E. T. FETTER.

### $1,000 Challenge.

I OFFER to place *one thousand dollars, cash*, into the hands of a party chosen, against *one thousand, to be paid* into the hands of the same party, by any manufacturer of threshers in the United States, if a machine can be found that will thresh and clean, fit for market, or seed, with the aid of *only two horses*, 100 bushels of wheat and rye, in less time than I can with my "Excelsior Wrought Iron Cylindrical Thresher and Cleaner." The grain to be thoroughly threshed, without white caps or broken, and the straw delivered long enough to stack, and free from chaff. The winner to receive the $2,000 with both machines and power.

An acceptance of the above must be in the hand writing and over the signature of the acceptor, stating his ability to pay the forfeit, and sworn to before any legally authorised person.

For circulars address JOSEPH G. GILBERT, 216 Pearl street, New-York. Aug. 1—1t.

### Urmy's Patent Double Geared Self Adjusting Lever Horse Power,

FOR two or eight horses, price $65.00. *Urmy's Patent Endless Chain Power*, price from $65 to $100. *Urmy's Patent Corn Stalk Cutter and Grinder*, will cut and grind 100 bushels of corn stalk, or one ton of hay per hour, price $35 and $40. *Urmy's Patent Seed Drill* will plant any kind of grain, in any given quantity, at any required distance, on plowed or unplowed land. *Gilbert's Excelsior Thresher and Cleaner* will ride on Urmy's two horse Railway Power, to which wheels can be attached and thus drawn by two horses to any place desired, and the same team can thresh and clean, fit for market, one half to three-quarter bushels of wheat per minute. The subscriber has been informed that a number of parties have infringed on Urmy's Railway power, I notify such persons, and all infringers, that they will in time be dealt with, and to avoid correspondence I publish the claim of Mr. Urmy. "Constructing the links of the Endless Chain of a Horse Power, in the manner described, so that they form firm connection and a permanent axle for the friction rollers, while at the same time they constitute the rack by which the power is transmitted, substantially as set forth, by which means the use of axles extending through from side to side, is dispensed with, while the advantage of the roller attached to the platform is retained, forming a cheap and efficient horse power. County rights on the above machines for sale for $100 and upwards. State rights or the entire unsold States, sold on advantageous terms. Profits in manufacturing 100 per cent. Castings to those purchasing rights at cost.

Aug. 1—1t. JOSEPH G. GILBERT, Att'y for Inventors.

### Kinderhook Wool Depot.

THE subscribers continue the business of receiving and selling wool on commission. Several years experience, an extended acquaintance with Manufacturers, and increased facilities for storing and making advances on wool, will enable them, it is believed, to give satisfaction to those who may favor them with consignments.

All who desire it, can have their clips kept separate.

Their charges for receiving, sorting, and selling, will be ONE AND A HALF CENTS PER POUND, and insurance at the rate of 25 cents on $100 worth of wool for each term of three months and under.

Kinderkook, June 1, 1852—3t. H. BLANCHARD & CO.

### WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,

Eagle Foundry and Machine Shop,

May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

### STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,

Eagle Foundry, No. 110 Beaver st., Albany, N. Y.

May 1, 1852—6t.

### PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191, Water-st., New-York.

Jan. 1—tf.

### EMERY & CO.'s

### Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co., is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.

July 1—tf. 25 Cliff street, New-York.

### FIELD SEEDS.

AUSTRALIAN WHEAT.—Very superior. The berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New-York. Several years' experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. Price, $4 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

BUCKWHEAT, of the best kinds in market.

RUTA BAGA, or Sweedish Turnep Seed. The Purple Top and other superior varieties.

TURNEP SEED.—Large White Flat, Long White, Red Top Flat, Yellow Aberdeen, Yellow Stone, and other improved kinds for the field or garden. A. B. ALLEN & CO.,

June 1, 1852—tf. 189 and 191 Water st., New-York.

### Albany Drain Tile Works.

*No 60 Lancaster Street—West of Medical College, Albany.*

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

| | | | | | |
|---|---|---|---|---|---|
| 5½ | inch Rise, or | 4½ | inch Calibre, | $18 00 | pr. 1000. |
| 4½ | " " | 3½ | " | 15 00 | " |
| 3½ | " " | 2½ | " | 12 00 | " |

SOLE TILE.

| | | | | | |
|---|---|---|---|---|---|
| 4½ | inch Rise, or | 3½ | inch Calibre, | $18 00 | pr. 1000. |
| 3½ | " " | 2½ | " | 12 00 | " |

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

### Albany Tile Works.

*Corner Patroon and Knox Streets, Albany.*

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.

March 1—6t A. S. BABCOCK, Albany.

### Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A. B. ALLEN & CO.,

Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

### Valuable Farm for Sale,

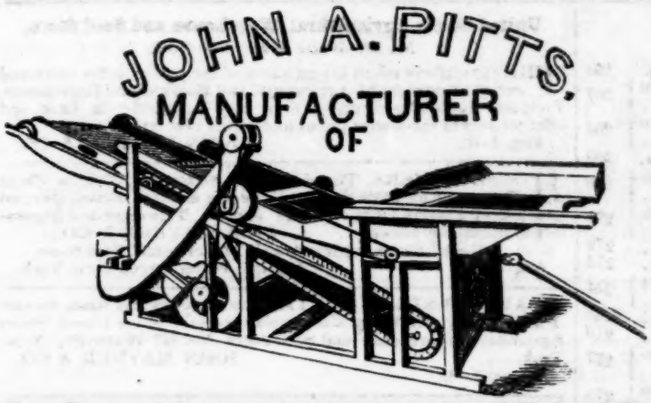
SITUATED in the town of Smyrna, Chenango county, two miles north of the village, and one mile west of the Chenango river—it contains 130 acres, 30 acres in timber suitable for fencing and other farming purposes. The land is in a good state of cultivation, well fenced and watered. The buildings are extensive, commodious and mostly in good repair. A large orchard of grafted fruit. One half of a good water power and saw-mill included. Price $30 per acre.

Smyrna, July 1, 1852—2t.* J. W. COLLINS.

### Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.

THE Transactions of the New-York State Agricultural Society, vols. 1 to 9, for sale at the Office of "THE CULTIVATOR," price $1 per vol.




**PITTS' PATENT SEPARATOR**

**AND**

**DOUBLE PINION HORSE POWER.**

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium*.

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz: *the best Machine* for threshing and cleaning grain, now in existence.

I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will be dealt with according to law.

JOHN A. PITTS.

Buffalo, N. Y., July 1, 1852—tf.



**Great Sale of Short-horn Cattle in 1852.**

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1834 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1845, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will be catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of N. York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably TEN or TWELVE young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

In addition to the stock above enumerated, will be eight thorough bred Herefords—three cows, one two-year-old bull, one yearling bull, and three calves. One of the cows, (Rarity,) was imported by Messrs. Corning and Sotham in 1841. The other cows and calves are her descendants by bulls of the same importation.

Also, two or three Devon bull calves, got by Mr. Ambrose Stevens' imported bull "Candy," bred by Mr. Quartly, of Devonshire, England, and out of cows descended from the herd of the late Earl of Leicester.

Also, two pairs of thorough-bred, six-year-old Short-horn oxen, and two or three pairs matched two and three year old steers.

Also, ten or twelve South Down buck lambs, got by an imported Ram from the celebrated flock of Jonas Webb, of Babraham, England, and out of Ewes descended from the flocks of Mr. Webb, and Mr. Ellman, of Sussex.

The sale will be on the 18th August, on the premises occupied by Peter Gurbrane, at the Homestead farm of Gen. Van Rensselaer, on the Troy Road, two miles above Albany, where the stock will be about ten days previous to the sale.

Catalogues will be ready by 15th June, and forwarded to all post-paid applicants.

For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

June 1. LEWIS F. ALLEN, Black Rock, N. Y.



**New and Important Insurance.**

**Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.**

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c CAPITAL, $50,000.

GEORGE MOORE, Plattsburgh, Sec'y.

I. C. MIX, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.



**Kell's Improved Horse Powers and Threshers.**

WHITE & PRENTISS, successors to Philip H. Kells, would respectfully inform the public that they are now manufacturing Horse Powers, Thrashing Machines, &c., with the valuable improvements made by Philip H. Kells, and solicit the call of such as wish to purchase single or double RAILWAY HORSE POWERS, SEPARATORS, OVER OR UNDER SHOT THRASHING MACHINES, of the latest and most approved construction, and of the best workmanship and materials. From their enlarged and improved facilities for carrying on the business the subscribers are confident they can supply customers with as good work, and on as liberal terms, for cash, as any other establishment in this state.

Orders from any part of this or other states, will be immediately attended to, and promptly supplied. Hudson, June 1, 1852—3t.*



**A First Class Dairy Farm for Sale.**

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,

May 1, 1852—tf. Oxford, N. Y.

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### New Edition of American Fruit Culturist.

**Just Published, by DERBY & MILLER, Auburn, N. Y.**

THE AMERICAN FRUIT CULTURIST; containing directions for the propagation and culture of Fruit Trees, in the Nursery, Orchard, and Garden; with descriptions of the principal American and Foreign varieties, cultivated in the United States. By JOHN J. THOMAS. With over 300 accurate illustrations. SEVENTH EDITION; containing 40 pages of new matter, with full directions for the management of dwarfs and pyramids, besides some hundreds of smaller additions, and many new engravings. 1 vol.—over 400 pages—price $1.

"A book of great value."—*Gen. Farmer.* "Worth its weight in gold-dust to any new beginner."—*Moore's Rural New-Yorker.* "It should be in the hands of every fruit grower."—*Ohio Cultivator.* "There is no vacant space in it—it is like a fresh egg—all good, and packed full to the shell."—*Prairie Farmer.* "The million who purchase it will find matter adapted to their wants, superior to any work as yet published."—*Cleveland Herald.* "An invaluable addition to our agricultural libraries."—*Wool Grower.* "Manifests careful and laborious research, close and continued observation, and an excellent systematic classification"—*Western Hort. Review.*

Aug. 1, 1852—2t.

### MANURES.

PERUVIAN GUANO, 2¼ to 2½ cents per pound.
BONE DUST, when taken in equal quantities, $2.25 per barrel.
BONE SAWINGS, separately, $2.50 per barrel.
PLASTER, $1 to $1.25 per barrel.
POTASH, 3¼ to 4 cents per pound.
CHARCOAL, $1 per barrel.
SULPHURIC ACID, 2¼ to 2½ cents per pound.
SUPERPHOSPHATE OF LIME, 2½ cents per pound.
WOODS' RENOVATING SALTS, one cent per pound.

For sale at the State Agricultural Warehouse, No. 25 Cliff street, New-York. LONGETT & GRIFFING.

Aug. 1—2t.

### Seed Wheat.

AUSTRALIAN WHEAT, Canada. White Flint, Soules, Mediterranean, in bags or barrels. For sale by
LONGETT & GRIFFING,
Aug. 1—2t. No. 25 Cliff street, New-York.

### Superphosphate of Lime,

FOR farming purposes, in quantities to suit purchasers. Analyses will be sent to those that desire it. For sale at the State Agricultural Warehouse, No. 25 Cliff street, New-York.

Aug. 1—tf. LONGETT & GRIFFING.

### United States Agricultural Warehouse and Seed Store,

*No. 197 Water Street, New-York.*

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

HORSE POWERS, Threshers, and Separators, Endless Chain Powers of all kinds ever made for one and two horses, also cast iron Sweep Powers for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,
United States Agricultural Warehouse and Seed Store,
Aug. 1—1t. No. 197 Water Street, New-York.

HAY AND STRAW CUTTERS, of all styles and sizes, for cutting Hay, Straw, or Corn Stalks, for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water-St., New-York. JOHN MAYHER & CO.

August 1—1t.

### Fowls for Sale.

AFTER August, the subscriber will have for sale Fowls raised this season, from the following stocks:

Shanghaes—Forbes' Buff. Marsh's do., Perley's do., Andrew's White, White's Black, and Kirtland's.

Cochin Chinas, the Queen's stock and Bailey's. Also, Black Spanish.

Warranted pure blooded. They have been bred with care, and are worthy the notice of breeders or fanciers.

Albany, N. Y., Aug. 1—2t. J. M. LOVETT.

### FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or BLANCHARD and BURT of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

### NEW-YORK AGRICULTURAL WAREHOUSE.

### A. B. ALLEN & CO.,

### 189 and 191 Water Street, New-York.

HORSE POWERS, Threshers, and Separators. The Endless Chain or Railway Powers of our own manufacture, both single and double-geared, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

3d. Eddy's Circular Wrought-iron large Cog Wheels, for one to six horses. A new and favorite power.

4th. Trimble's Iron-sweep Power, for one to four horses.

THRESHERS.—Improved Threshers made upon the best principles, threshing clean with great rapidity.

FAN MILLS for Wheat, Rye, Oats, &c., of the best construction.

RICE FAN MILLS made expressly for the South.

GARDEN AND FIRE ENGINES, very useful machines, arranged on wheels, for watering gardens or walks, and afford protection from fire. They will throw a strong stream 40 feet high, are easily worked and not liable to get out of order. Also, small Garden Pumps and Syringes of various styles.

HAY AND COTTON PRESSES.—Bullock's Progressive Power Presses, combining improvements which make them by far the best in use.

WATER RAMS, Suction, Force, and Endless-Chain Pumps; Leather, Gutta-Percha, India-Rubber Hose, Lead Pipe, &c.

CORN SHELLERS of great variety of patterns, to shell either by hand or horse power. Will shell from five to 100 bushels of corn per hour.

WAGONS and CARTS, double or single horse, suitable for the farm, the road, and heavy trucking.

GARDEN and CANAL BARROWS, light made or extra strong, as desired.

MEAT CUTTERS, capable of cutting fine for sausages, and other purposes, 100 lbs. or more per hour.

Southern plows of all sizes and patterns, the Double Mould Board or Fluke plow for furrowing and cultivating the sugar cane, &c.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.



## THE CULTIVATOR

*Is published on the first of each month, at Albany, N. Y., by*

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